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Payday Borrowing: Credit and Networks among the Economic Insecure

Author
Alvarez, Anthony Steven

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Payday Borrowing:

Credit and Networks among the Economic Insecure

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in Sociology

by

Anthony Steven Alvarez

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ABSTRACT OF THE DISSERTATION

Payday Borrowing:

Credit and Networks among the Economic Insecure

by

Anthony Steven Alvarez

Doctor of Philosophy in Sociology

University of California, Los Angeles, 2013

Professor William G. Roy, Chair

This dissertation examines the financial position of payday borrowers using the most detailed nationally representative survey of American finances – the Survey of Consumer Finances. Payday loans are short term, unsecured loans generally less than five hundred dollars. Borrowers pay dearly for such loans, as fees are typically $15 for every $100 borrowed. Because the term for these loans is never more than two weeks, the annualized percentage rate is quite large ~ 390%. For the first time, in 2007 the Survey of Consumer Finances included a question about use of payday loans, and so it is now possible to expand the analysis of payday borrowing beyond basic demographic information and income.

Given these high costs, why would households choose this option for dealing with financial emergencies? I show that payday borrowing is driven more by a lack of resources, in particular available credit alternatives, rather than low incomes. In addition, budgeting is a significant factor. Another alternative that households often look to is financial support from friends and family. Access to financial support is driven by many of the same factors that make

these households insecure. Nevertheless, I show "private safety nets" do indeed reduce payday borrowing. But network relations don't just entail receiving. The provision of financial support is correlated with overspending and increases the odds of payday borrowing.

This dissertation makes several contributions to our understanding of payday borrowing. First, using the detailed data on savings and budgeting practices, it shows the importance of building resources to managing budgetary shortfalls. Second and relatedly, I show that borrowers have little financial alternatives – they are effectively shut out of credit markets, and at the same time their network relationships can be both a help and a hindrance for avoiding payday loans.

Committee page

Darnell Montez Hunt

Gabriel Rossman

Michael A. Stoll

William G. Roy, Committee Chair

University of California, Los Angeles

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Table of Contents

Acknowledgements

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First off, I need to thank a group of folks who took me under their wing when I was an undergraduate at the University of Maryland, College Park. James (Jim) Murphy, Todd Stillman, Wend Wiedenhoft, and Agnes Shieh all helped convince me that I was a pretty good thinker in my own right, and that maybe exploring graduate school wouldn't be a bad idea. I spent many many a night, up late discussing sociological theory at their homes, conversations that have influenced me in ways I still recognize today. I am happy to still call them my friends.

A number of faculty at the University of Maryland were also supportive of me. Wendy was my TA in two classes with George Ritzer, in social theory and the sociology of consumption. George gave me great feedback on papers and had really kind things to say that boosted my confidence. I will always be grateful for that. But it was three professors in particular who really gave me a helping hand and helped guide me along the path from graduate student to masters student. The first was Bart Landry. His class on stratification, and the subsequent readings and research we did on "The New Economy" gave me great experience doing interviews and thinking through problems. John Robinson, well, perhaps no other individual faculty member is more deserving of my thanks than he. He stole me away from the University of Maryland survey research center to come work with him, and then began the craziness. I will

always, always remember running models in his office at College Park, throughout the summer. John's office, um, décor, was legendary and the image of it is seared into my brain. John gave me my first idea of what a professor's life would be like. He paid for my first flight out west, stranded me at his amazing apartment in Berkeley, leaving me with his old stick shift car to take me into the city. As one of his graduate students, and helping run his large grant with NSF, I met so many talented amazing graduate students, kept returning to the West Coast, and, of course publishing. And he pushed me to continue on and get a PhD. Last but not at least is my mentor and friend Meyer Kestnbaum. Herr Kaptain, he was a relatively new faculty member when I was a graduate student at college park. He was a welcome, sane addition to John's grant, and would frequently accompany Jim and Todd and I's forays into the city for intellectual talk over beers. His classes STILL inform how I think about the world and form the basis of what I think a historical comparative scholar does. But more than anything else, he has been a staunch friend and mentor, and every year I look forward to coming home and having dinner with his wonderful wife Cynthia (yay I finished!) and their girls Sabrina and Lydia. It puts a big smile on my face to think that the next time I go home and meet with them, it will be as colleagues.

My time at UCLA has been quite the journey. It's taken much much longer than I ever expected it would, I have to admit. But it's taken nothing less than a completely redefinition of who I thought I was, how I organized my life, and how I write and work to get through the department. It was at times very very painful, but I am a better scholar, and a better man, for it. I am lucky to have so many friends over the course of graduate school that it's difficult to single out some small subsample for mention, for fear of leaving someone out. But I must give special attention to a few. First, of course, are my cohort mates, too many to mention. Jaeeun Kim was a marvel to be around, and being in classes with her always pushed me to work harder to keep up.

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I am also lucky to have been one of the few male members in a group of amazing woman – Amada Armenta, Marisa Gerstein-Pineau (and her husband Bernie and daughter Ilona, and a shout-out to their late great cat Bob), Nazgol Ghandnoosh (and her husband Jed and baby Asha),

and Rocio Rosales. You all have been amazing, and have helped keep me sane throughout this process. I don't know what I did to become an unofficial member of the collective, but thanks so much you all. Included in that group, is, of course, my wonder girlfriend and partner, Sylvia Zamora. What is there to say? I wouldn't have finished without her love and support. Thank you for being such a great partner through this. Thank you.

Outside of the department Matt Jackson has been a partner a crime for many an adventure, from roof top valley shenanigans, to parking tickets, to Christmas carols, my time in LA would definitely be worse without him. Matt, Luis Zayas, and the Maryland ex-pat Phu Diep formed a terrible foursome that made LA feel like home for a while. Our times drinking, playing video games, going out, watching movies, watching Avatar, talking Dresden and generally being nerds are some of the best times of my life, truly. I've also been lucky to meet a great group of guys through basketball. There are so many of them I can't name them all, but Chris Nwaezeapu, Nate Drati, Felipe Martinez and Matt "Elvis" Smith, deserve special recognition. I met all of them after I joined the UCLA Faculty, Graduate Student, and Staff basketball game that has been running for over 25 years. Playing with that group of guys has kept me sane since the end of my first year, and I literally don't know what I would have done some weeks without them. I will always remember those games, and the games I now run with some of them Wednesday nights. Collectively, they are truly like a family to me – Miakia, George, Troy, Val, Bob, Brian, John, Rooster, Gary, Jason, the list goes on and on. With any luck I'll be able to stop back in from time to time.

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Anthony S. Alvarez

EDUCATION

2013	Ph.D. Sociology, University of California, Los Angeles *Dissertation*: Payday Lending: Credit and Networks among the Economically Insecure *Committee*: Bill Roy (Chair); Gabriel Rossman, Darnell Hunt, Michael Stoll (Public Policy) *Comprehensive Exams*: Economic Sociology; Class, Politics and Society
2003	M.A. Sociology, University of Maryland, College Park
1999	B.A. Sociology, University of Maryland, College Park

RESEARCH INTERESTS

Economic Sociology, Inequality, Historical Comparative Sociology, Race/Ethnicity

PUBLICATIONS

Krippner, Greta and Anthony S. Alvarez. 2007. "Embeddedness and the Intellectual Projects of Economic Sociology." Annual Review of Sociology 33: 219-240.

Robinson, John P. and Anthony S. Alvarez. 2004. "The Social Impact of the Internet: A 2003 Update", in *Transforming Enterprise*, William H. Dutton, Brian Kahin, Ramon O'Callaghan and Andrew W. Wyckoff, eds. MIT Press.

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Robinson, John P., Alain Chenu and Anthony S. Alvarez. 2002. "Measuring the complexity of hours at work: the weekly work grid" *Monthly Labor Review*, v.125(4): 44-54.
Robinson, John P., Meyer Kestnbaum, Alan Neustadtl, and Anthony Alvarez. 2000. "Mass Media Use and Social Life Among Internet Users." *Social Science Computer Review*, v.18(4): 490-501.

FELLOWSHIPS AND GRANTS

2010 – UCLA Institute for Research on Labor and Employment Research Grant

2009 – 2010 John Randolph and Dora Haynes Foundation Dissertation Fellowship

2009 – UCLA Institute for American Cultures Graduate Research Grant

2009 – Institute for Social Science Research Fellowship, UCLA

2005-2008 – Eugene Cota-Robles Fellowship, UCLA

2001-2002 - C. Wright Mills Graduate Fellowship, University of Maryland, College Park

CONFERENCE PRESENTATIONS

"Embedded Transaction: Financial Support and Payday Borrowing", Round Table presentation, ASA 2012 meetings, Colorado

"The Introduction of the British and American Income Taxes", Social Science History Association 2006 meetings, Minneapolis, MN

"Social Mechanisms and Social Outcomes in Digital Inequality Research", Anthony S. Alvarez, Presented at the 2004 Annual Sociological Meetings in San Francisco, CA (Communication and Information Technology Roundtable)

"Behavioral and Environmental Correlates of Digital Inequality" Anthony S. Alvarez, Presented at the 2004 Annual Sociological Meetings in San Francisco, CA

"Can Knowledge Workers Be Corralled in the Dot Com World?" Anthony S. Alvarez. Presented at the 2002 Annual Southern Sociological Society meetings in Baltimore, MD.

PROFESSIONAL ACTIVITIES

2008-2009	UCLA Sociology Department, *Admissions Committee*
2008-2009	UCLA Sociology Undergraduate Association, *Graduate Student Panelist*
2006-2007	UCLA Sociology Department, *Sociology Graduate Student Co-President*
Member	American Sociological Association
Member	Social Science History Association

Chapter 1

Introduction - Payday Lending: Credit and Networks Among the Economic Insecure

"I had a woman come in - she gets $1,100 a month for Social Security and pays out $800 a month for her payday loans." These people aren't idiots, or in need of counseling or more "disclosure." One of my clients was in payday-loan hell and climbed, cut and bleeding, back to solvency. But then the city booted her car, an uncle living with her lost his job... she's back in hell again. In a country of no real safety nets, the ersatz American safety net is a payday loan of 700 percent."

- Thomas Geoghegan, writing in the *American Prospect*

"Here, I feel respected…"

- Mr. Dueno talking about a payday lending institution in West Palm Beach, Florida, quoted by Jessica Silver-Greenberg in the *Wall Street Journal*

"But that's the price you have to pay. I'd rather pay the fee and get over with it. I don't want to ask my relatives or friends for the money."

- Oscar Mendoza in Los Angeles, quoted by Hector Becerra in the *Los Angeles Times*

Payday lenders are now more numerous in the US than McDonalds, and within California, there are more payday lenders than McDonalds and Starbucks combined (Stegman 2007; Li et al 2008). Payday lenders, which provide short-term, unsecured small loans, are now the predominant financial institution within many minority and impoverished neighborhoods (Graves 2003; Temkin and Sawyer 2004; King, Li, David and Ernst 2005; Wheatley 2010). The increasing prevalence of payday lenders has led to concerns over their possibly predatory practices, which seem to take advantage of the most financially vulnerable. This has prompted political figures, government organizations, and policy advocacy groups to call for stiffer regulations. Recently, however, economists have suggested that these regulations may in fact

worsen the position of low and moderate income households by eliminating viable credit alternatives (Zinman 2008; Morgan and Strain 2007).

Payday loans are short term, unsecured loans generally less than five hundred dollars. Borrowers pay dearly for such loans, as fees are typically $15 for every $100 borrowed. Because the term for these loans is never more than two weeks, the annualized percentage rate is quite large - 390 percent. Payday borrowing has become big business—the Consumer Financial Services Association of America reports that over 20,000 payday locations gave out $38.5 billion in short term loans to 19 million households (CFSAA, n.d.). Estimates of the number of payday borrowers range from 2 to 6 percent of US households (Apgar Jr and Herbert 2006; Lawrence and Elliehausen 2007; PEW 2012). Payday lenders, and other "alternative" financial service providers, are now common in many low and moderate income minority communities (CDC 2008; Gallmeyer and Roberts 2009; Graves 2003; Temkin and Sawyer 2003).

Why would borrowers accept such unfavorable terms? First, despite the costs, payday loans can be less expensive than service disconnects or overdrafts and late fees when used properly (CFSA n.d.; Elliehausen 2009; Stango and Zinman 2009; Thaler 2005). The question of why households don't use other alternatives is particularly vexing, given that most payday borrowers are not destitute and often have incomes close to the US median. Substantial proportions also have credit cards (Apgar Jr and Herbert 2006). However, borrowers often report few savings and though they may have credit cards, they tend to have little available credit (Elliehausen 2009; Elliehausen and Lawrence 2001). This may be due to difficulty maintaining budgets, and there is evidence that payday borrowers have greater levels of debt servicing payments than non-borrowers (Elliehausen 2009). In addition, many borrowers are credit constrained—they are unable to get additional credit (Elliehausen 2009; Elliehausen and

Lawrence 2001; Stegman and Faris 2003). Payday lenders have historically run no "formal" credit check, making them a viable option for those who have been turned down for credit elsewhere.

But credit markets are not the only alternatives that households have when faced with financial exigencies. Many households are involved in complex exchanges of various forms of support with friends and family members (Bianchi, Hotz, McGarry, and Seltzer 2008). These networks are vital sources of emotional and psychological support. And many households provide rides to others, ask for help with child care, or provide care to elderly parents. But a crucial role these networks play is often in assisting households financially. Financial assistance from parents is crucial for educational achievement, and many a parent has helped a new college graduate with a place to stay or money for a down payment on a house. These "private safety nets" (Harknett 2006) can play a particularly important role in helping struggling families make ends meet (e.g. Edin and Lein 1997).

This dissertation evaluates the financial position, and financial struggles, of payday borrowers. While payday borrowers may be a very specific group, they are, in fact, a stand-in or proxy for a much larger group—the struggling working and lower middle classes, who have been caught between two historical forces. The first is stagnating median wages since the 1970s, despite rising productivity and profitability. The second is the democratization of credit[1], which also began in the 1970s, but exploded in the 1980s. As such, one could argue that this dissertation is an attempt to evaluate a case of alternative means of dealing with economic insecurity. Payday borrowers are not the chronically poor, but the near poor. It is instructive that,

[1] This generally refers to expansion of consumer credit, in particular revolving credit of various kinds, beginning in the late 1970s and ramping up through the 1980s. Perhaps the most important element was the Marquette decision in 1978. Essentially, this allowed nationally chartered banks to avoid state regulations capping interest rates. This spurred the supply of consumer credit immensely.

as I will show, in 2007, households that reported being on some form of social welfare program (not including social security) reported lower levels of income than payday borrowers, but greater levels of savings.

I take advantage of several new data sources to evaluate the full financial position of payday borrowers. For the first time, in 2007 the Survey of Consumer Finances (hereafter SCF), the preeminent survey of American households' financial lives, included a question on payday borrowing. The SCF also asks respondents about their ability to get emergency financial support, as well as whether they are currently supporting anyone outside the household financially. I exploit these and the financial questions to investigate exactly how income, debt holdings, credit position, and networks interrelate in the lives of low and middle income (hereafter LMI) households. The 2007 SCF is representative of US households prior to the "Great Recession" that began in 2008. I make use of newly released re-interview data that went back and spoke with these same households in 2009. Thus I am able to look at how payday borrowing changes across time, and how it might have been affected by the economic downturn.

The remainder of this chapter deals with defining payday lending, and discussing why it has become a public issue. There are numerous state and federal efforts at regulating payday loans underway, while scholars debate the net effect on low and moderate income households' welfare. I also provide additional detail as to how networks impact the financial well-being of households. I then conclude with an overview of the remaining chapters.

Public Issues

Payday lending has become a hotly contested issue. It is clear that payday lending is oriented towards LMI households that have previously had access to credit markets and are

already associated with first-tier financial institutions, if only tenuously. But over the last two decades, the overall level of indebtedness has risen dramatically. Indeed, some 76.4 percent of Americans held some debt, and the median value of that debt doubled from 1989 to 2004, despite minimal growth in median income (Engemann and Owyang 2008). It may be that households have acquired greater levels of debt to smooth consumption over a long period of stagnating wages (Barba and Pivetti 2009). There is some evidence of this. In Figure 1, I plot the growth in real income against growth in consumer debt, beginning in 1980. While income has doubled over the period, the rise in consumer debt has far outstripped income gains[2]. Perhaps most alarmingly, credit card debt grew most quickly during this period among lower income households. It is notable that credit card debt has spread to lower income individuals, and these groups represent the largest segment of growth in credit card debt (Engemann and Owyang 2008). Indeed, as Figure 2 illustrates, households have seen a steady rise in the amounts of their disposable income going towards servicing their debt obligations over the last two decades. Among low income households, debt levels doubled between 1983 and 1995 (Bird et al. 1998), and between 1989 and 2004 credit card debt for LMI households increased at a rate three to four times that of more affluent households (Fellows and Mabanta 2007). Poorer households also tend to be highly leveraged: that is, they borrow against a greater share of their income (Mann 2009). Overall, the rise in consumer debt appears to have increased levels of financial security for LMI households (Weller and Douglas 2005; Weller and Logan 2009)

[2] Note that consumer debt does not include mortgage debt, which also grew rapidly, particularly as the housing bubble grew from 2001 through 2006.

Under these circumstances, it is relatively easy to see the attractiveness of payday loans. They do not require a credit check, thus the probability of being declined is low[3]. You need only have a job, or, in some instances, be collecting unemployment insurance (Faturechi 2010). The industry prides itself on convenience and providing a non-intimidating environment (Silver-Greenberg 2010; Webster 2011). Geographically, they are located near working class communities, particularly minority neighborhoods that tend to be underserved by main-stream financial institutions (King et al. 2005; Li, Parrish, Ernst, Davis 2009; Wheatley 2010). And, for the most part, payday loan patrons are generally satisfied, if not pleased, with their experiences, even when they are aware of high costs. In some respects, payday lending represents the formalization and institutionalization of alternative banking in the United States. For over a century, pawnshops have been the "poor man's banker", and payday lenders emerged as a more convenient alternative to pawn (Brown, Findlay, Lehman, Maloney, and Meehan 2004; Caskey 1999). Nevertheless, there has been substantial movement to regulate the industry since its inception in the early 1990s (Fox 1998). There are two reasons that payday loans have been targeted. First is on the basis of the high cost of the loans. The second is the effect the loans have on borrowers, who appear to enter into "debt spirals" or "debt traps" after borrowing.

Are payday loans usurious? Consumer advocates believe they are, often citing that payday loans have an annualized percentage rate (APR) of nearly 400 percent. The industry counters by pointing out that APRs are a poor way to evaluate the cost of the loans given the short terms of the loan (Lehman 2005; Webster 2011). A better metric is comparing payday loans to its alternatives. And here payday loans fare much better – Figure 3 compares fees and

[3] While one of the benefits of payday loans has been that they do not perform a credit check or report payday loans to credit agencies, this is changing rapidly. Payday borrowers now have their own credit reporting system, Interfax, and new companies like CoreLogic are increasingly using data on payday borrowing payments to generate more comprehensive credit scores (Bernard 2011).

APR for a $100 payday loan versus overdraft protection offered by many banks, credit card late fees, and bounced checks with an insufficient funds charge. Payday loans may indeed be better than their alternatives when used appropriately (Elliehausen 2009; Stango and Zinman 2009). And, until relatively recently, the overdraft and insufficient charges that produced billions of dollars in revenues for banks had come under relatively little scrutiny, even as fees increased steadily from 2000 to 2007 (GAO 2008; Lieber 2009). Eliminating payday loans simply leads households to substitute more expensive forms of credit (Littwin 2008; Webster 2011). Finally, the industry points out that while their fees may be high, they are in line with the levels of risk, and that profit margins are not outrageous. Webster (2011) the CEO of Advanced America, put his company's profit margin around 11 percent.

What consumer advocates take issue with, more than the high fees, is the problem of repeat borrowing. In other words, whatever profit lenders are earning, it is evident that they are built on the back of chronic borrowers, not the one-time, emergency borrower that is often described by lenders. By now, there is no refuting that one-time borrowers are a relatively small percentage of all borrowers, and that, if anything, one-time borrowers are more costly to lenders than are repeat borrowers—economies are achieved by bringing back previous borrowers. Nearly every survey that has ever been done either asking borrowers about the frequency of borrowing, or looking at data provided by lenders, confirms this pattern (Melzer 2011; Morgan, Strain, and Seblani 2008; Skiba and Tobacman 2010; Stegman 2007; Stoianovici and Maloney 2008).

A study done by the Consumer Financial Protection Bureau (CFPB 2013) is instructive. Using data provided by banks and lenders, the study found that only 13 percent of borrowers took out one or two loans, and that this group accounted for 2 percent of all fees collected. A whopping 48 percent took out at least 11 loans over 12 months, and this group accounted for 75

percent of all fees collected. Thus, while payday lenders may not charge excessive prices, their business model is built on getting repeat customers, as this is where they generate the bulk of their revenues. In fact, the *median* borrower in the CFPB study took out ten payday loans over 12 months, generating $458 worth of fees (CFPB:22). Twenty five percent of customers paid $780 or more in fees over the 12 months of the study (CFPB:23).

Overall, it would appear that payday loans may represent the least bad option available to the financially insecure, and it remains to be seen whether additional regulations would provide benefits to consumers. While I explore this issue in greater depth in Chapter 5, it should be noted that studies looking at areas where greater levels of regulations have been enacted have been notably mixed. Some find that access to payday lenders (living in an area, or near an area, where payday loans are still available) is associated with greater numbers of bankruptcies and late payments (e.g. Skiba and Tobacman 2009). Still others find the exact opposite—the payday loans reduce the number of bankruptcies (e.g. Morgan and Strain 2008).

What is clear is that the specter of additional regulations has provoked political mobilization on the part of payday lenders. Prior to the financial crisis, the industry was doing quite well, both in terms of revenues and stock prices. In 2005, a Wall Street Journal article noted that for the past five years, stock in publically traded payday lending corporations had beat Standard and Poor's 500 stock index in performance (Richardson 2005). By 2008, another large payday lending corporation, EZCorp, reported its 23rd consecutive quarter of earnings growth (Eaton 2008). The financial crisis was good for the industry, with share prices on the rise, some to record highs, and with many public lending companies meeting or exceeding earnings expectations (Cowan and Ordonez 2011). The threat of additional regulations is one of the few clouds hovering over future growth prospects for the industry, as recent IPOs from lenders

identified new regulations through the CFPB as one possible source of lower revenues in the future (Cowan and Ordonez 2011). Indeed, given that over 25 percent of US consumers are estimated to have poor credit, with FICO scores less than 600, there appears to be a growing market for payday loans (Webster 2011).

Regulations have come in a variety of forms, but mostly at the state level. Some are zoning restrictions that stipulate areas where payday lenders can locate, while others limit the number of loans taken out, limit debt collection activities by lenders, or, most severely, cap the interest rates on loans. It is not clear how these regulations impact the financial prospects of lenders, though Washington State's experience is telling. The state instituted relatively benign restrictions, limiting the total number of loans to eight, constructing a payday loan database to track loans, and instituting payment plans for borrowers at risk of rolling over loans or defaulting in January 2010. Figure 4 shows the impact graphically—it shows total loan volume in millions of dollars and the number of operating branches. Both dropped precipitously following enactment of reforms. Whether or not this was preemptive, or because of real declines in profitability and revenues, is unclear, as are the effects this has had on consumers of small loans in Washington. But the industry is certainly sensitive to the threat of additional regulation.

This is particularly true for rate caps. Rate caps have been passed in North Carolina and Montana, and in the latter, payday lenders simply packed up and left the state. In Oregon, officials claimed that nearly 80 percent of the payday loan storefronts were shuttered after the 36 percent rate cap was passed (Lifsher and Christenson 2008). Webster (2011), the CEO of Advance America, argues that small loans at the rate cap, usually 36 percent, are not profitable, and in fact that lenders lose money on each loan at that rate. His calculations show that 36

percent APR implies a $1.40 fee per $100, down from $15 in most states. Because of this, he argues that rate caps are simply an alternative way of eliminating payday loans.

The industry has organized to protect itself, and brought to bear its considerable resources to fight state level regulation. In Ohio, local proxies for one industry group, the Consumer Financial Services Association, outspent their adversaries $16 million to $265,000 trying to defeat a rate cap (Anand 2008). The industry also is willing to play hardball. During that same election period, Rent-A-Center, which owns a number of payday lending outlets, pressured charitable groups to bow out of working with advocacy groups like Coalition for Responsible Lending, threatening to withhold its $500,000 donations to anti-hunger programs (Phillips 2008). The organization, Ohio Association of Second Harvest Foodbanks, agreed to stop working with advocacy organizations, despite finding that 15 percent of families that had used their services had also taken out at least one payday loan in the last year.

The lobbying appears to have been effective: in 2009, a measly $28,000 in campaign donations to state politicians helped defeat a rate cap bill that previously had majority support (AP 2010). A rate cap in California was effectively killed, with officials citing the lack of other viable credit alternatives as one possible reason (Lifsher and Christensen 2008). It also helped that the lobbying arm of the Financial Services Products Association in California contributed over $100,000 to politicians in 2007. And in a reversal, in 2012, California Assemblyman Charles Calderon (D-Whittier) co-sponsored AB 1158, which would increase the maximum payday loans in California to $500. Numerous community and advocacy groups successfully fought against it, demanding that it also include a cap on the number of loans taken out in a year, set to six (LA Times 2012).

The relationship between main stream banks and payday lenders has also raised concerns (Chan 2010). Payday lenders often have lines of credit through these large banks, and at times, lenders have strategically used relationships with out-of-state banks to skirt payday lending bans in other states (Center for Responsible Lending 2012)[4]. Judges have declared this illegal, but the practice appears to have been wide spread with lenders in Georgia, Pennsylvania, New York, West Virginia and Minnesota. This was a significant blow for the industry, with one large lender, Advance America, reporting that 28 percent of its revenue was from exploiting this loophole in the law (Richardson 2005).

Because of all the activity at the state level, lenders have also tried to shop for regulators. The industry began lobbying to move regulation of payday lenders from the state to the federal Office of the Comptroller of the Currency, which has a history of writing lax regulations to supersede state regulations (Bar-Gill and Warren 2008; Dougherty 2012). And Payday lenders also fought hard against oversight by the Consumer Financial Protection Bureau when the scope and design of the agency was being debated in Congress, arguing that they played no role in the financial meltdown (Chan 2010). The CFPB was given broad powers by Dodd Frank to regulate payday lenders (Hawkins 2011). A rate cap was originally included in the Dodd Frank legislation authorizing the construction of the CFPB, similar to the one candidate Obama pledged in 2008. Then Senator Dick Durbin introduced two bills (2008 and 2009) attempting to put the rate cap into law, though this failed during debate over the Consumer Financial Protection Bureau (Wright 2011).

Finally, one question that has emerged is what alternatives to payday borrowing can financially strapped households use? Can main-stream financial institutions provide similar

[4] Through the Federal Deposit Insurance Act, which allows a state-chartered bank to charge the rate of interest allowed in any state in which it does business.

services at more reasonable costs? It does not seem that community banks, credit unions, or small regional lenders have been able to make small dollar loans profitable (Stango 2007; Carr 2007). And the FDIC developed a pilot small lending program, with only mixed results (Weissman 2008). In comments to the Consumer Financial Protection Bureau, a group of advocacy organizations (including Center for Responsible Lending, Consumer Federation of America, and the National Consumer Law Center) charged that bank payday loans suffered from many of the same flaws that lead borrowers into debt spirals (Comments 2012). Anecdotal evidence does suggest that these loans, often referred to as "direct-deposit advance," are taken out along with payday loans and contribute to mounting fees and insecurity (Randall and Zibel 2011). Additionally, bank-delivered small loans, when mismanaged, can place individuals into the Chex System, which effectively prohibits holding a bank account at many major banks. Thus there are different dangers associated with small loan programs administered by banks where households have accounts.

Ultimately, the difficulty over regulating the payday loan industry may rest on the perspective with which we view it. At least one argument for regulating credit products comes from Bar-Gill and Warren (2008), who suggest that, like faulty products that injure, credit products can also injure. From this perspective, the difficulty is that debt is seen as a matter of contracts, rather than as a product. A contract perspective implies that, as long as the parties have been clear about the nature and requirements of the exchange, then the law should for the most part allow the transaction, regardless of the consequences. Much as a car might have design defaults, or manufacturing shortcuts to limit costs, that can possibly endanger consumers, Bar-Gill and Warren argue that credit products are designed to hide risk and encourage default, leading to poorly functioning, inefficient markets. So whereas a contracts approach focuses on

the terms of the transaction (and thus highlights the importance of disclosure), a products approach is oriented towards the consequences of the exchange, one that may be justified by the myriad evidence of chronic rollovers among payday borrowers.

Networks

A focus on networks is attentive to how money flows among a connected group of individuals. I call the networks across which the funds flow 'financial networks.' While these networks are commonly conceptualized as containing family, they often contain kin (Stack 1977; Heflin and Patillo 2002), and even friendly acquaintances in the case of rotating credit associations (Biggart 2001). Like most of this literature, but unlike traditional network analysis, I do not focus on the construction of the network itself, but its social maintenance, reproduction and use. There are numerous testaments in sociology to the importance of financial networks in making ends meet, particularly within the ethnographic literature. Edin and Lein (1997) studied decisions to go on welfare or work among 214 women who experienced financial hardships. A substantial majority of their sample relied on assistance from people in their network, including families, boyfriends, or their child's father (Edin and Lein 1997:258). Neither economic sociologists nor economists have attempted to incorporate the importance of these types of financial transfers into accounts of the everyday financial lives of households. Most importantly for this project, no one has attempted to tie these network flows to the demand for credit and patterns of borrowing and saving.

But networks provide more than just a safety net, they directly aid in attaining a whole host of important outcomes, including educational attainment (Lee and Aytac 1998) and housing (Conley 1999). These effects, however, are not all positive: indeed, a consistent finding among network studies has been that networks may also produce negative outcomes. For instance,

growing up poor and having members of your network who are poor decreases the probability of having a checking account, and by extension, asset accumulation (Heflin and Pattillo 2002). One hypothesis may be that poorer, needier participants of a financial network can produce negative outcomes for other members. Some studies suggest that the upwardly mobile may in fact receive more than they have given from more stable members (Higginbotham and Lynn 1992). There are also unexplained patterns of variance with respect to network transfers, as blacks are nearly twice as likely as whites to feel a sense of debt to family for aid, a finding consistent with earlier work showing upwardly mobile blacks feeling a sense of "social debt" for support they have received (Higginbotham and Lynn 1992; McAdoo 1978).

While these studies show the importance of networks and point to possible reasons for multivalent outcomes from participation, they provide little by way of understanding how individual members manage these relationships. They also do not shed light on how individuals incorporate these transfers into their financial practices. My study, by recruiting members of respondents' financial networks, attempts to understand the conditions under which network support is sought, expected, or declined and whether payday borrowing and other outcomes are related to particular patterns of financial network relations. It may be that financial support from family, kin, or friends is dependent upon healthy or functional relationships (Sarkisian and Gerstel 2004), but they may also be related to questions of stigma, resource availability, appropriateness, or other issues of meaning.

Carol Stack's (1977) influential work on kinship networks provides a perfect example of the ambiguity of financial network transfers. A family she was studying received a large insurance payment that it planned on using for a down payment on a house. But once the insurance payment was cashed, other kin in need of assistance quickly made claims to the

money. The family gave so much of the money that in the end not enough money was left for the down payment, though other members of the kin group now had the resources to pay rent or medical bills. It is exactly this type of dynamic that this study seeks to investigate, where collective outcomes may in fact be positive, though individual network members may face significant costs. Generally, financial networks do not intentionally produce collective goods, rotating credit associations notwithstanding, and this lack of coordination among network participants suggests that the costs and benefits of membership may be unevenly distributed. Under what circumstances is this is an acceptable outcome for members? What are the types of transactions for which network members are willing to sacrifice? And, importantly, what are the mechanisms through which network members might try to protect their resources from being drawn down by others? A recent study of savings programs, which limit withdrawals of monies for highly specified reasons, shows that one of the benefits of these programs is that they provide individuals with explanations for why they can't provide resources to members of their financial networks (Sherraden et al. 2003). In other words, a reduction in the liquidity of resources is viewed positively, as it allows individuals to better manage their financial responsibility to other network members.

Contributions

This dissertation makes several contributions to the extant literature on payday borrowing by expanding our understanding of the role of financial position and evaluating how networks may serve to either exacerbate or ameliorate financial problems. The majority of the literature on payday borrowing details borrowers' income and inability to get credit, but few also incorporate debt holdings and budgetary practices (Elliehausen and Lawrence 2008; Stegman and Faris

2003; Hanson and Morgan 2005; Stegman 2007). Because of the detailed financial questions contained in the Survey of Consumer Finances, I can more fully explore how debt, debt payments, and overspending affect payday borrowing.

In addition, though there is a robust literature on the importance of financial transfer, or "private safety nets," to well-being (Henly et al. 2005; Wu and Eamon 2010), this literature hasn't been brought to bear on the analysis of payday loans. I expand previous work looking at involvement in financial network transfers by showing the importance of financial pressures to network relationships. If indeed households use financial support as a means to "smooth" consumption—to bridge financial gaps—then having access to friends and family willing to provide funds in times of an emergency should reduce the need for borrowing. But having access to this support is strongly associated with greater levels of financial resources.

Conversely, while the positive consequences of network involvement and transfers has been, by now, widely documented, the complex operation and outcomes associated with network relations are only now being explored quantitatively (Granovetter 1973, Portes and Sensenbrenner 1993). Here, I show that the provision of support to friends and family acts as another financial pressure on the household, and can lead to payday borrowing even after controlling for other financial variables. O'Brien (2012) has identified financial support as an important mechanism through which black/white wealth inequality is reproduced. This dissertation illustrates another way in which asset accumulation can be slowed—through the use of high cost credit.

Structure of the Remainder of the Dissertation

Chapter 2 provides a brief comparison of payday borrowers and non-borrowers among low and middle income households (those earning less than $80,000) in the 2007 Survey of Consumer Finances (SCF). The 2007 SCF was the very first government-sponsored, nationally representative sample of American households that included questions about household assets and debts as well as payday borrowing. Generally, I find that in terms of income, payday borrowing households do not differ substantially from other LMI households. It's in their accumulated resources that payday households distinguish themselves. In addition, they are much more likely to face financial struggles. For instance, consistent with previous research, payday borrowers are also much more likely to be "credit constrained," or unable to get additional credit in mainstream credit markets (e.g. mortgages or credit cards). I also document a self-evident, but less researched issue: that payday borrowing households are much more likely to spend more than they earn.

Chapter 3 explores an alternative strategy often used by households experiencing financial difficulties—seeking monetary support from friends and family, or what I call their financial networks. Households are often enmeshed in complex relationships of support with a wide variety of others: friends, coworkers, family members, neighbors, etc. Financial support is only one dimension among many possible forms of support (e.g. emotional and psychological), but giving and receiving money from financial networks is quite common. These flows of support, often described as "inter vivos" transfers, are important sources of assistance for families. While the positive consequences of participation in networks is now widely known, researchers have only recently begun to fully explore the full range of outcomes from dynamics of support that prevail within some networks. In this chapter, I take advantage of the detailed debt and asset data in the SCF to see how these variables affect two dimensions of behavior

within financial networks—whether households believe they have access to emergency credit from friends and family, and whether they provide financial support to someone outside the household. I use both logistic regression and heckman two-stage models to investigate the role of financial resources and financial struggles in network activity. While the household's financial position is an important determinant of both types of network activity, here too the household's budgetary activity matters—households that overspend are more likely to provide support, and support at greater levels. Thus there is some evidence that network dynamics and the household's ability to properly manage its budget are correlated.

Chapter 4 examines the determinants of payday borrowing among LMI households with a set of logistic regression models. More specifically, it tests how measures of financial distress may mediate the effects of resources. Additionally, it looks at the role of financial network relationships and how this impacts payday borrowing. I also address the role of networks. Though payday borrowers have relatively low rates of financial support, I test to see if perceived support is related to lower odds of borrowing. Households that provide financial support appear likely to also have budgetary problems, and I test whether providing financial support is associated with greater odds of payday borrowing, net of controls.

Chapter 5 uses the newly released 2009 SCF re-interview of 2007 to look at payday borrowing across time. Because of the impact of the "Great Recession," a greater share of households faced financial struggles, and it is clear that the rate of payday borrowing increased across the two time periods. The financial position of households that took out a payday loan also changed, with the range of income of households reporting borrowing increasing to over $100,000, illustrating once again the importance of stocks of resources, rather than flows of income. Because of the greater income of payday borrowers in time 2, I analyze the entirety of

the sample for both periods, rather than simply LMI households. I then use a set of random-effects models to elaborate on how financial position, financial struggles, and network relationships affect payday borrowing.

Finally, in the conclusion, I review the findings from the substantive chapters, and review some of the limitations of the dissertation. I end with a brief set of policy recommendations and an indication of where I believe fruitful research into financial practices of LMI households could take place.

Figure 1: Growth in Personal Income vs. Household Consumer Credit 1980-2007, normalized to 100 at 1980, source: National Income and Products Accounts and Fed Flow of Funds

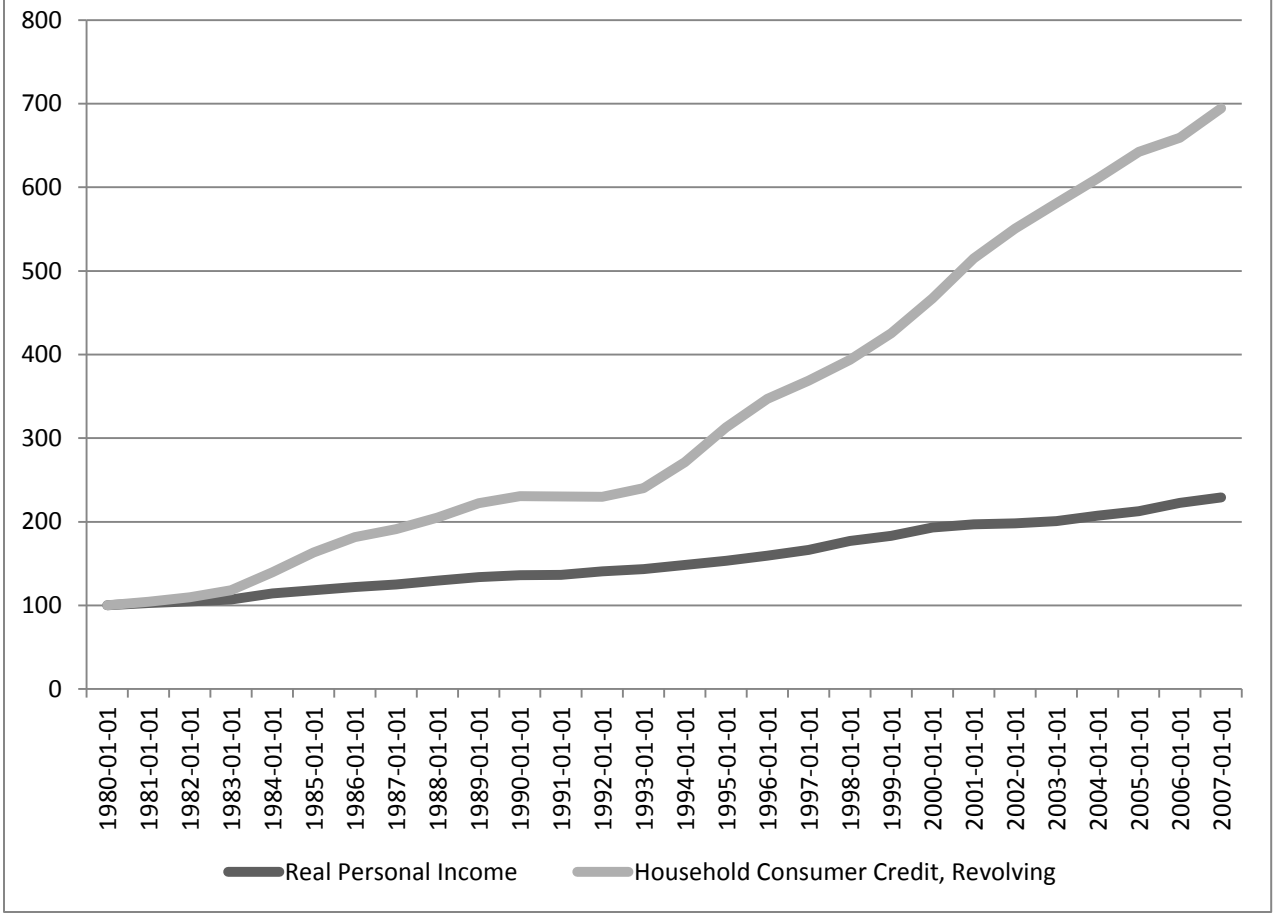


Figure 2: Financial Obligation as percentage of disposable income, 1989-2009, source: Board of Governors of the Federal Reserve System

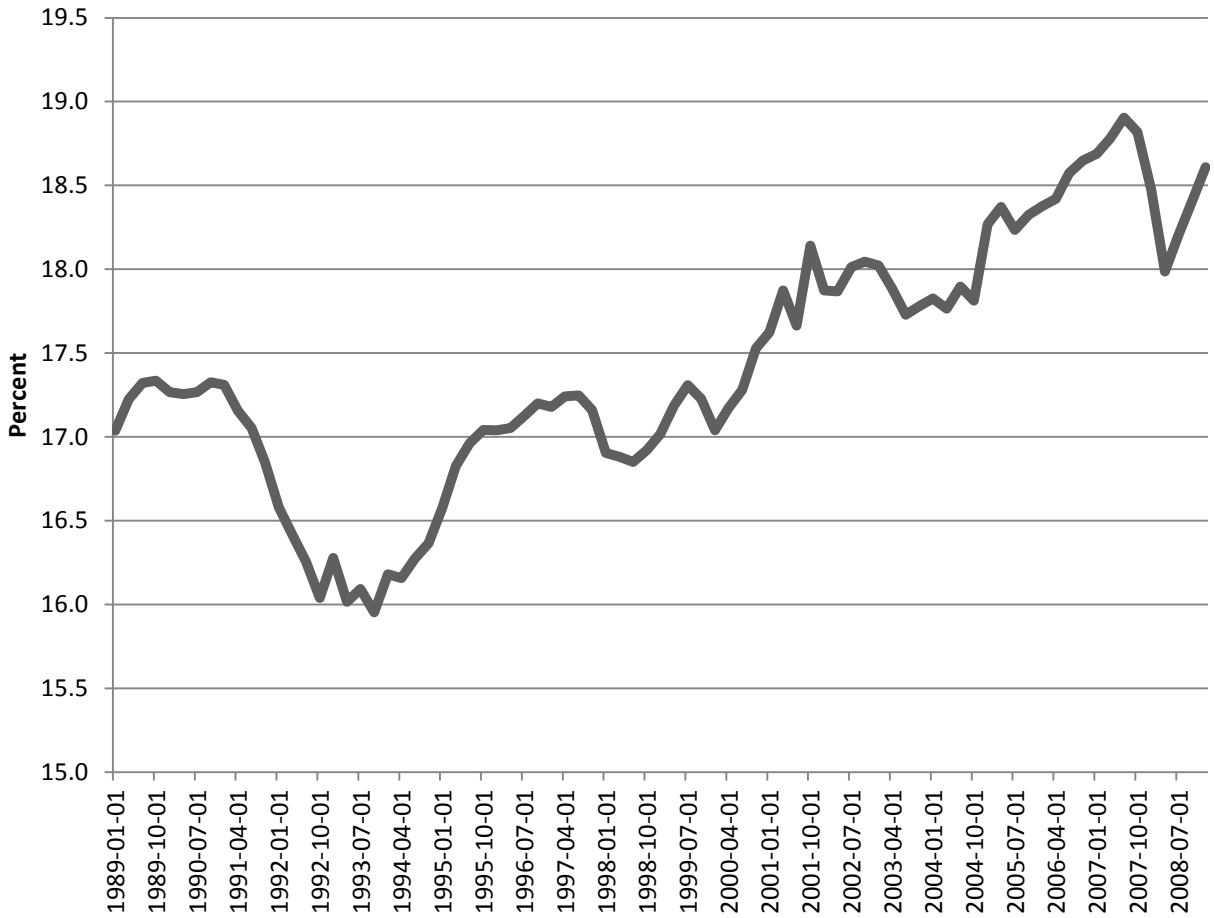


Figure 3: Fee and APR Comparisons of Financial Alternatives, source: CFSA (nd); Thaler (2005)

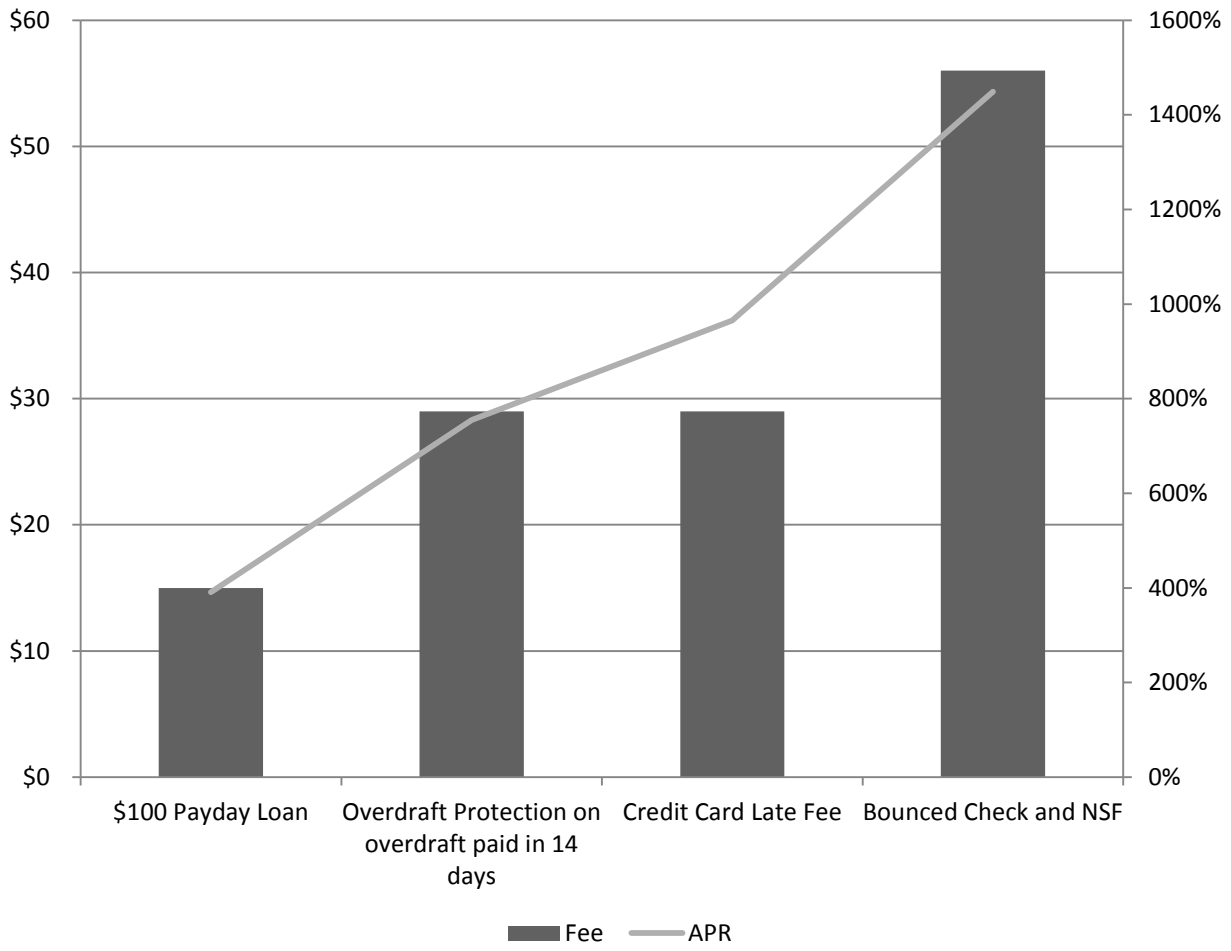
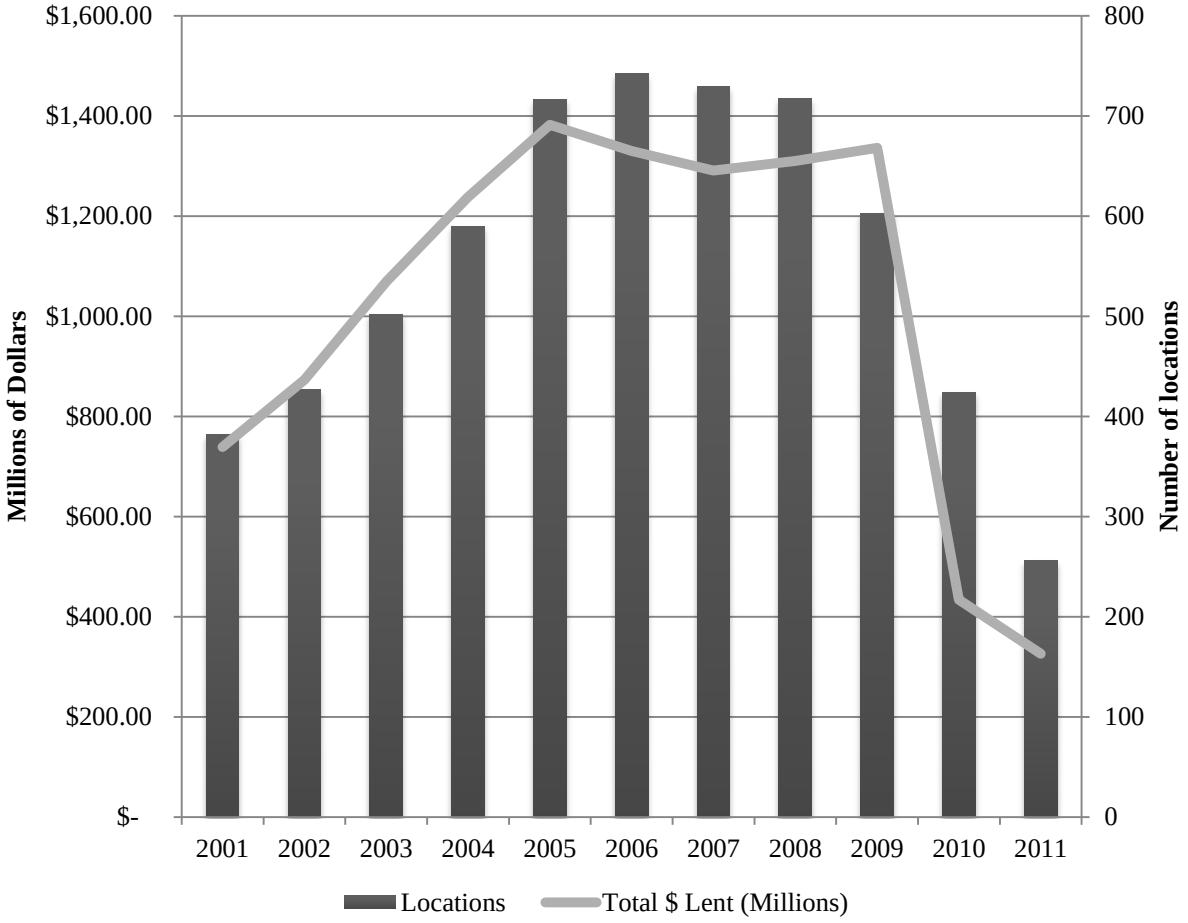


Figure 4: Washington State Payday Lending, Total Dollar Volume and Number of Locations , 2001 - 2011. Note: Regulations enacted Jan 1, 2010



Chapter 2

An Overview of the Financial Position and Practices of Payday Borrowing Households

In the previous chapter, we explored the outline of the debates regarding the role of payday loans in the life of credit constrained households. One issue that remains unresolved in this debate is how to characterize the payday lending population—as either facing chronic financial and budgetary shortfalls as a result of a pattern of suboptimal financial behaviors, or facing short-term acute financial pressures.

In this chapter, I bring to bear the most authoritative set of data to look at the financial positions of payday borrowing households in comparison to other, similarly situated low and moderate income households (households earning less than a combined $80,000 per year). What we want to uncover are the ways in which the payday lending population may be a distinct population, rather than simply a subpopulation of LMI households that have experienced an acute financial crisis. The consequences of changes to credit availability for chronically financially strapped households may be quite different than for those experiencing short term acute difficulties.

To tease out these differences, I compare a number of financial behaviors and attitude contained within the Survey of Consumer Finances. Here the focus is on providing a full profile of the financial holdings and liabilities of payday borrowers and low and moderate income households. I begin with an analysis of their liquid asset holdings. Liquid assets represent a household's savings on hand, an easily accessible source of reserve funds. However, many households that report taking out a payday loan do so due to "emergency" circumstances, thus they may have already used their savings, and may not have been able to replenish them. Thus,

given that the household must have taken out a payday loan within the last 12 months, you would expect these households to have lower levels of savings than other households. To get around this, I also compare the households' reported level of desired savings for emergencies.

In some respects, because liquid assets are easily spent, we would expect liquid asset differences to vary considerably over time, given the particular patterns of savings or dissavings. Instead, looking at the households' underlying reasons for savings and savings planning behavior may provide us a better portrait of long term financial behaviors. A household's reasons for saving, and the amount of saving they say they need for emergencies, may be a better basis for comparison as they will fluctuate less than on hand savings balances. Continuing along these lines, I then look at whether the household reports overspending, including how the household made up the difference between spending and income. I follow this up with investigations of debt, debt servicing, credit attitudes, assets, home ownership, net worth, credit history, and bankruptcy.

Payday Financial Position

Income: the SCF looks at a variety of types of income, but here I focus on total household income. This includes not only the income of both households heads (if there is more than one), but also income from a variety of sources (rental income, investment income). Because this analysis looks only at low and moderate income households, the contribution of these other forms of income is quite small. Among non-borrowing LMI households, mean income is $35,500, while payday borrowers average $31,700. Here, the composition of each group matters – when comparing single households, there is only a $1000 difference between them, a

difference that is not significant. But coupled households show a difference of over $5000, a statistically significant difference.

Income Variation: The survey of consumer finances also measures whether the household is currently experiencing an income variation. By income variation, the SCF wants to know whether for some reason you are making less money than your "normally" do, either because you hours were increased/decreased, had higher/lower than expected capital gains, etc. Income variation, in particular a decrease in income, is associated with greater likelihood of payment defaults and bankruptcies (Getter 2003). Payday borrowers are significantly more likely to be experiencing a decrease in the income. Sixteen percent of non-borrowing LMI households report having lower than normal income, while 25 percent of payday borrowing households are experiencing lowered incomes.

Can the fact that a greater proportion of payday households currently have lower than expected income explain the differences in income between the two groups? The SCF also measures "normal pay," the income a household would normally earn. In general, when looking at a household's normal income, it is typically quite a bit higher than income reported in the current year. But even here there is a significant difference between the two groups. In a "normal" year, non-borrowing LMI households report roughly $38,300 in income, while payday borrowing households average $34,200. Overall, while payday borrowing households do have similar income to non-borrowing households, there is a small significant difference between the two groups, a difference that remains even when comparing "normal" incomes.

Savings

Liquid Assets: To look at a household's level of savings, I combine the household's checking and savings[5] balances across all accounts. Here is where we see large differences between the two groups. Because savings is heavily skewed, I compare median savings across both groups. Among LMI non-borrowers, median savings is $1900, compared to $320 among payday borrowers. While the income difference between the two groups is quite small, one possibility is that income differences may explain why payday borrowing households have such lower savings. I compare the percentage of a household's yearly income that is currently held as savings, or what I call the saving rate. The median saving rate among non-borrowing households is roughly 5 percent. In other words, the middle household among non-borrowers holds about 5 percent of its total yearly income in the form of savings (its total checking and savings balance). In comparison, the median payday borrowing household has about 1 percent of annual income as savings. So even when controlling for income, payday borrowers have less savings.

One indication that the liquid asset levels we see are more the consequence of financial situations that lead to borrowing rather than long term poor financial behaviors is that their savings levels are lower than even current participants in social welfare programs.

One way to compare if households hold different levels of savings or have different financial behaviors is to compare their overall approach to savings. Savings may be different because households have different priorities or face very different circumstances. Below, I look at a variety of variables that speak to whether payday borrowers face substantially different circumstances or hold different attitudes about savings. More specifically, I look at whether households are expecting major expenses, whether they are saving for those expenses, reasons for savings, and the amount of savings they believe they need for emergencies.

[5] Money market accounts are included in savings accounts, though not CDs.

Expecting Major Expenses: The SCF asks respondents whether they are expecting a major expense within the next five to ten years. If they are, it asks respondents what those major expenses are. Finally, it asks if those households that report expecting major expenses have started saving.

Households that report expecting a major expense are a little over two times more likely to take out a payday loan (2.0 percent vs. 4.5 percent). Not surprisingly, then, payday borrowing households are about 20 percentage points more likely to report expecting a major expense. This holds true even when comparing households in the pre and post life cycle "hump", which I have approximated here using a cutoff of age 45. They do not report noticeably different patterns of expenses, however—both borrowing and non-borrowing households report expecting education, healthcare, and home buying expenses[6].

But comparing across both groups among those who reported expecting a major expense, payday borrowers are far more likely to report not having saved for this expense (47 percent vs. 66 percent). Again, this difference holds even when looking at the pre and post lifecycle "hump".

Reasons for Savings: In addition to asking about major expenses, the SCF also asks for the most important reasons why the household tries to save[7]. The SCF also allows households to report their top six reasons for saving. While there are over 30 responses to this question, the vast majority of responses fall into only about five or six categories. The most important are those who are saving for retirement (25 percent), but also important are those saving for children (12 percent), and those who are generically saving for the future (9 percent). Saving for a house, and for living expenses or bills, accounts for another 10 percent. One important category is saving for

[6] I should also note that one set of major expenses having to do with supporting household and family members, are not frequently reported among either borrowing or non-borrowing households. The importance of this point will become clearer when we begin to talk about network differences between payday borrowers and non-borrowers.
[7] This is actually asked BEFORE the major expenses questions.

emergencies, or what economists call "buffer stock saving." This is the first response of roughly 21 percent of all LMI households, and about 26 percent of all payday borrowing households. Interestingly, a greater proportion of those who report saving for emergencies have taken out a payday loan (2.9 percent vs 4.2 percent).

Needed Levels of Saving: One complication of the cross-sectional design of the Survey of Consumer Finances is that we don't know if the lower level of savings demonstrated by payday borrowers is cause or effect. In other words, some households may have taken out a payday loan precisely because they don't have savings, and this is the case generally whether due to high levels of indebtedness, poor savings behavior, or spending money in other ways (health costs, supporting family members, etc). Other households may not face these same chronic obstacles, but instead have short term liquidity issues. We can't differentiate between these two possibilities, given that we don't know what pre-borrowing savings levels look like—we only have their *post* borrowing savings levels. We do, fortunately, have another measure, which asks respondents what their level of needed emergency savings would be, in dollar terms. There is a strong positive correlation between stated emergency borrowing amounts needed and levels of currently held liquid assets— 0.78. The first order correlation between needed emergency savings and liquid assets, controlling for net worth, is 0.65. Controlling for total debt levels reduces the correlation further, to 0.59. One thing we can to do is to compare desired levels of savings as a proxy for the demand for savings. Table 1 presents comparisons of median liquid assets, desired savings levels, and percent of desired savings held as liquid assets between borrowers and non-borrowers. While the gap between borrowing and non-borrowing households in liquid assets is quite large, the gap in desired emergency savings levels and percent of desired savings currently held is much smaller.

What is clear from this comparison is that households that payday borrow not only save less, but perceive needing less savings, even after controlling for overall net worth and total debt level. Of course, desired emergency savings levels may be conditioned upon the households' capacity to save. But there is some tentative evidence that, overall, payday borrowing households may underestimate their financial needs, leaving them more vulnerable to financial shocks.

One possible explanation for this may be that payday borrowing households are more likely to have shorter financial planning horizons (or high discount rates for the future). This would lead to higher current consumption of income and less savings. The SCF does ask about planning horizon, with responses that range from the next few months to years into the future. I recoded this variable into a dummy variable indicating high discount rates—coding all those who plan only a few months ahead as high discounters, and all others as not high discounters. Roughly 26 percent of non-borrowers are high discounters, versus 36 percent of borrowers. Thus, borrowers are significantly more likely to have a short time horizon.

We can also look at the difference in savings between those with high discount rates and those without. Overall, those with high discount rates hold much lower levels of liquid assets than those with longer time planning horizons. Among all LMI households, those with a high discount rate have, on average, $6100 in liquid assets, versus about $10,000 among those with longer planning horizons. Looking at medians, median liquid assets among high discounters is $670, versus $2450 among those who are not discounters. Focusing on payday borrowers, planning horizons do not appear to make much difference for savings levels, as there is only about a $200 difference in the savings levels of both groups ($1250 vs $1060)[8].

[8] It is worth noting that differences in discounting may be a by-product of the household's position in the life-cycle. Very young, or very old, households may be more likely to discount the future. But the difference in mean age between the high and non-high discounters is only one year (50.6 versus 49.6).

Table 1: Median savings and mean desired savings, by borrowing

	Median Liquid Assets	Desired Emergency Savings[9]	% of desired savings held in liquid assets[10]
Non-borrowers	1900	4000	54.5
Borrowers	320	2000	12.5

Overspending: Payday borrowing households, while not necessarily showing large differences in saving motivations, clearly have lower liquid assets on hand, and they expect to need lower levels of emergency savings. But are they also more likely to overspend? Aside from questions about how households try to save—whether they have a savings plan—the SCF also asks if the household spent more than its income in the previous year. Given that payday borrowing is associated with the need for emergency funds, it should come as no surprise that payday borrowers are more than two times as likely as non-borrowers to have overspent in the last year (20 percent vs 46 percent).

Additionally, overspending is associated with lower levels of savings on hand. Median savings among non-overspenders is $2000, versus $850 for those that overspend. Here again, we may be capturing the effects of lower demand for savings, but here the mean difference in desired savings are not appreciably different ($21,000 versus $25,000).

Households were also asked how they dealt with overspending—using money from savings, borrowing, defaulting on their bills, or asking friends or family for help. Among non-payday borrowers, other forms of borrowing and using savings are the two most popular responses (42 percent and 40 percent, respectively) to household overspending. While some

[9] Actual question wording: "About how much do you think you (and your family) need to have in savings for emergencies and other unexpected things that may come up?"

[10] Note that this gives the average across households and does not simple divide the aggregate results

households did turn to their networks (7 percent) or simply default (2 percent), these were not popular options. Among borrowers, however, the primary response to overspending was to borrow—78 percent of these households did so. Borrowing households were more likely to default (7 percent) than to rely on savings (4 percent).

Debt Levels: If payday borrowing households are more likely to borrow than to use savings, given their lack of savings, does this imply that they carry large debt loads? Table 2 below shows mean and median debt levels, percentage of households with credit cards, and mean and median available credit. I also show the household's debt service ratio and financial obligation ratio, both measures of the household's financial burden in servicing its debt.

As one might expect, the number of payday borrowing households with a credit card is substantially lower than for LMI households overall. Still, a sizable plurality (44 percent) does have access to a card. If we look at how much credit is currently available on those cards, however, we see that borrowers have much less available credit. Indeed, because available credit is highly skewed, a better description of the overall distribution is the median, which shows that the median payday borrowing household has no available credit. Again, this is consistent with payday borrowing as a source of emergency credit.

Looking at their debt burden from credit cards does not paint payday borrowing households as having significantly higher amounts of outstanding credit card debt. The median balance for those with credit cards among LMI households is roughly $2000, while for payday borrowers it's roughly $540. A slightly wider and more useful measure is the "Debt Service Ratio," or DSR. This measure is used by the Federal Reserve to track the proportion of households' monthly income used to pay their debts. The DSR looks primarily at revolving

credit accounts and mortgage debt[11]. Low and moderate income non-borrowers and borrowers have quite similar DSRs, indicating that neither pays a particularly large percentage of their income to service their debt.

I computed a slightly more expansive measure that the Federal Reserve also uses—the financial obligation ratio. This ratio includes vehicle lease payments, insurance payments, and rent (rather than just mortgages) to get a fuller sense of the household's monthly financial responsibilities[12]. Here we do see some indication of greater financial burdens being borne by payday borrowing households. Some of this may reflect that only mortgage payments, and not rent payments, are included in the debt service ratio, whereas both are included in the FOR. As we saw with respect to asset holdings, payday borrowing households are less likely to own their homes, and thus are less likely to be paying a mortgage.

Credit Attitudes: The Survey of Consumer Finances also asks a series of questions about whether it is ok to borrow (to go into debt), and about going into debt for different classes of purchases—living expenses, educational expenses, cars, and luxury items like furs, jewelry, and vacations. Here, borrowers and non-borrowers among LMI households hold very similar views, with one very large exception—borrowing for everyday living expenses. Payday borrowers are for more likely to believe that it is ok to borrow for living expenses. While a majority of LMI households do in fact agree with borrowing for living expenses, among borrowers, support for this reaches past 70 percent. But on every other measure, payday borrowers and non-borrowers are nearly identical in their opinions about debt.

[11] The debt service ratio is calculated using the typical monthly payment on the household's outstanding debts. In the case of credit card payments, 2.5 percent of the outstanding balance is used as the estimate of the minimum payment due for any month.

[12] In my calculation of the FOR, I also included estimates of the household's food expenditures. Because there is little analysis of the food measure in the SCF, I compared reported spending on food items by different household types to a similar measure used by the Department of Agriculture in a separate survey. Estimates of household monthly food costs were very similar, though the SCF estimates were slightly lower.

Table 2: Credit Holdings

	% with Credit Card	Median Credit Card limit	Mean Available Credit	Median Available Credit	Median Credit Card Debt	Overall Debt Service Ratio	Overall F.O.R
Non-Borrowers	63	14000	10700	2000	800	13.5	28.2
Borrowers	44	1900	650	0	540	12.1	33.2

Assets and Net Worth

Assets: Low and moderate income households, even when defined on a purely income basis (that is, in terms of flows and not stocks), hold very little assets. The largest asset that most households have is their home.

CDs: Certificates of Deposits are short term savings vehicles that pay fairly low interest rates, but have penalties for early withdrawals. CDs are fairly popular, but even here only 14 percent of LMI households currently held a CD, and no payday borrowing households held one.

Bonds: About 12 percent of LMI households owned some form of bond, with a median market value of $1000. Six percent of payday borrowers had a bond, with a median value of $200.

Stocks: Despite a democratization of asset holdings, stocks tend to be distributed unevenly, if widely. About 12 percent of non-borrowing LMI households hold stock, with a median value of $12,000. The mean value for payday borrowers is about $600.

Home Ownership: Payday borrowers are much less likely to own a home than are other LMI households. While 63 percent of LMI households own their dwellings, only 44 percent of

payday borrowing households do so. In addition, the value of homes differs substantially across the two groups. The median home value for LMI households is $150,000. The median home value for payday borrowers is $60,000. The difference in home values is reflected in the amount of equity each group currently has available in their homes. Equity here refers to the difference between the value of the home and the total value of all outstanding housing secured loans. The median amount of equity among LMI households is roughly $80,000, while for payday borrowers it's $1000[13].

Overall Net Worth: LMI households have much of their overall net worth tied up in housing wealth, and indeed the correlation between the home values and net worth is 0.62. Median net worth among LMI households is $50,500, while for payday borrowing households its $4000[14]. This lower net worth is also reflected in the frequency with which these households have negative net worth. A negative net worth arises when households hold more debt than the value of their total assets. About 9 percent of LMI households have a negative net worth, but 28 percent of payday borrowing households have a negative net worth. As we can see from the analysis of debts that follows, this does not stem from a much larger debt holdings, but rather larger debt holdings relative to their assets. In the US, the relationship between income and wealth is only moderately strong (Wolff and Zacharias 2006), and in the 2007 SCF, the correlation is on the order of 0.4.

[13] It's worth noting that some of the differences in housing values may be related to cost of living associated with particular areas of the country, as well as particular urban areas. Unfortunately, data on region and urbanicity are not included in the public version of the SCF.

[14] To be clear, net worth here includes on the asset side: stocks, domicile (home, mobile home), farm, CDs, insurance policies, vehicles, retirement accounts (401k and IRA), mutual funds, the market value of bonds, and any investment real estate. On the debt side it includes all mortgages, vehicle loans, educational loans, credit card balances, and other consumer loans.

While payday borrowers do have a lower level of assets and net worth, this can also be seen looking at the overall distribution of net worth. Breaking down the net worth of LMI households into quintiles clearly, and then looking at the rates of payday borrowing across

Credit History and Bankruptcy

We have so far seen that payday borrowing households, though similar to other LMI households, to have lower levels of savings, a lower demand for savings, are less likely to have a credit card, and are less likely to have available credit. More generally, though, they don't appear to have accumulated large debt overhang, nor are they facing much tighter budgetary conditions, at least as measured by either the DSR or the FOR. They are more likely to have overspent, however, at thus this may be related not to higher expenses, but the lower demand for savings.

We have also seen that payday borrowing households are more likely to borrow when they overspend, versus pulling from their savings. The only real formal credit vehicles available to most households in need of emergency funds are credit cards. But we've seen that many payday borrowing households have no available credit on their cards. Why would these households not simply apply for additional cards, or why would households *without* credit cards not try to acquire them? Table 3 below shows rates of payment defaults, as well as whether or not the household has been turned down for credit in the last five years, and whether a household has declared bankruptcy.

Payday borrowing households are three times more likely to have ever paid a loan payment two or more months late, versus all other low and moderate income households. They are also three times as likely to have been denied credit within the last five years. They are also

four times more likely to have not applied for credit at some point for fear of being denied. They are also twice as likely to have ever filed for bankruptcy.

Table 3: Credit and Payment History

	Default More than 2 months late	**Denied Credit last 5 years**	**Didn't Apply fear of being denied**	**Declared Bankruptcy**
Non-Borrowers	7%	18%	8%	13%
Borrowers	24%	56%	35%	27%

Conclusion

Given this analysis, two questions remain: Are payday borrowers in poor financial straits because of chronic, long term financial pressures, or do they face acute, short term problems of liquidity? Secondly, given this information, how can we characterize the financial position of payday borrowers?

We have seen that payday borrowers both have lower savings, but that they also seem to need lower levels of buffer stock savings. We cannot determine if the low level of savings is cause or consequence of borrowing from this survey. The Consumer Financial Protection Bureau, using data from banks and payday lenders, did track account balances for select individuals for a twelve month period. Looking at account holders who used "deposit advanced" services, a bank service similar to payday loans, they found that over the twelve month period of the study, these individuals had far lower daily account balances. Indeed the levels where of similar magnitude observed in the SCF, with accounts that did not use deposite advanced services having balances nearly ten times greater than deposit advanced users. This is again

suggestive that the underlying issue may not in fact be short term fluctuations in the household's financial position, but rather chronic issues central to the economic wellbeing of the household.

This is consistent with some of the data on payday loan rollovers discussed in chapter 1. Payday loans may have the short-term benefit of assisting some households during a rough patch, households that are able to quickly bridge the period from one paycheck to another. But for a much larger group, payday loans fix short-term problems, then quickly become part of the overall chronic budgetary struggles the household faces, leading to roll-overs and increasing fees.

Chapter 3

Networks

In the previous chapter, we looked at the financial position of payday borrowers. We discovered that while payday borrowers have slightly lower levels of income than non-payday borrowing LMI households, they have very different patterns of asset holdings, including substantially lower levels of liquid assets, a lower demand for savings, higher levels of debt, lower rates of homeownership, lower levels of equity in their homes, and lower overall available credit. They were much less likely to qualify for additional credit, were more likely to have filed for bankruptcy, had significantly lower levels of net worth, and indeed, were much more likely to have a negative net worth than typical low and middle income households. But in thinking about the well-being of households, another factor we need to consider is the resources available to them, and that they make available to others, in their networks. These networks are one way that households try to "smooth" their consumption when there is a financial shortfall (Kotlikoff and Spivak 1981; Cox 1990; Cox and Jappelli 1990).

There are several ways in which the resources of a household's network can impact the household's well-being. Perhaps the most common is through intergenerational transfers, or the transfer of financial resources from parents to children. This takes place quite frequently when children are young, in terms of housing, educational expenses, food, and clothing that young children receive from their parents. These flows, however, are not typically thought of as augmenting the financial position of the recipients, but as simply the costs associated with parenting. Researchers instead have focused on flows to children after they have entered the labor force, be it at age 18, or in the early to mid-20s after college. These flows need not be

financial (e.g. college graduates moving back home as they look for employment), and they need not be large. Money from living family members is typically referred to as an inter vivos transfer.

Much of the intergenerational exchange literature focuses on the motivation of parents in providing transfers to their children (Bianchi et al. 2011): do family members provide transfers to others out of altruism and care for other family members, or with an expectation of future returns (the 'exchange' model)? In the altruism model, parents give unequal amounts to each child depending upon the needs of their children. In the exchange model, equal amounts are given to children in hopes of future returns (Bianchi et al 2011; Cox 2003). Economists are often interested in differentiating these motivations to help construct better social welfare policies. In particular, economists have studied whether or not social welfare policies may "crowd out" inter vivos transfers in ways that may lead households to be less well off (Cox, Hansen and Jimenez 2004). In this scenario, public assistance does not increase the overall welfare of struggling households, but simply displaces transfers the household already receives from private sources (the family). If public assistance were to completely crowd out private transfers, for no net positive impact on families, this would be an argument for drastically reducing public assistance, though there is little evidence of complete crowding out (Cox and Fafchamps 2008).

While these are important questions, my interest is somewhat more direct: I investigate how households' financial resources are important for determining both the perception and provision of financial transfers. Most models show that the probability associated with providing inter vivos transfers increases with rising income. I include financial controls not typically used in these models, particularly net worth and payments on outstanding debt, to determine how different types of resources (stocks versus flows) affect decisions about financial transfers.

In addition, I include measures of the household's budget and credit management. Inter vivos transfers, particularly between parents and adult children, are often thought to flow from the non-liquidity constrained households (i.e. households that have adequate savings and access to credit markets) to liquidity constrained households. I include a number of these measures of constraints in the models. For instance, those that spend more than they earn ("overspending") should be less likely to provide support and more likely to give smaller amounts. A household that must itself dip into its savings or acquire debt to meet its own budget demands should be less likely to provide support, and more likely to provide smaller levels of support. Similarly, a household that is shut out from credit markets or has had a credit application denied should be less likely to provide financial support. Some households might have to borrow in order to provide substantial transfers. Thus, I include a dummy variable for whether a household is credit constrained – in the last five years, has the household head been denied credit, or abstained from applying for fear of being rejected? Second, I use the household's debt service ratio (i.e. its debt payments as a percentage of total household income) to determine how the household's debt payments are related to the provision of support. To the extent that financial transfers are taken from disposable income, higher debt payments will decrease the amount of funds transferred. Despite long term trends in rising household indebtedness, levels of debt service payments have not been investigated as a possible inhibitor of financial support, either in terms of providing support or the amount of support provided.

Intergenerational Transfers

Researchers have recognized that intergenerational transfers are an important source of savings for households and an important mechanism through which wealth is transferred to

subsequent generations (Kohli 2004; Kotlikoff 1988; Mare 2011). The primary means by which intergenerational transfers impact the wealth distribution is through bequests – when households leave estates to the next generation through a will. Bequests and transfers arguably make up a substantial amount of current asset holdings, particularly for wealthier households[15]. Berhman, Pollack, and Taubman (1995) found that bequests had roughly twice the impact on wealth that other forms of intergenerational exchange do.

But a more common method by which resources are given across generations is inter vivos transfer, or a transfer between still living family or kin. These flows of financial support often are part of larger patterns of social support provision – emotional, psychological, and in-kind support provided among kin and family. Inter vivos transfers typically flow from parents to children, usually to aid in establishing a household, or to help bridge periods when the children's household is struggling financially (Bianchi, Hotz, McGarry and Seltzer 2012; Cox 2003; Cox 1990; McGarry 1999).

Estimates of the frequency of inter vivos transfers vary considerably. Eggebeen and Hogan (1987) report that roughly 50 percent of households are involved in transfers of financial resources, and these occur primarily during times of financial trouble on the part of the receiving household. Later research by Eggebeen, Hogan, and Clogg (1993) confirmed that estimate – that roughly 50 percent of American households were involved in exchanges. McGarry and Schoeni (1997) found that roughly 25 percent of households gave money to older children outside the household. They also find that as the number of children increased, so did the average transfer amount. Schoeni (1997) found that about 13 percent of households in the Panel Study of Income Dynamics reported providing a financial transfer. Wellman and Wortley (1990) find something

[15] The expectation of receiving a bequest can alter patterns of asset accumulation (Kotlikoff; Modligiani 1988; Weil 1994)

similar: roughly 15 percent of Canadian households had received or given a financial transfer. Wu and Eamon (2010), using the Survey of Income and Program Participation (SIPP) data, found much lower rates of financial transfers, on the order of 5 percent. Regardless of whether we use the low end or the high end of the estimate, it is clear that millions of American households are involved in exchanges of support with other households.

Researchers have also looked at how exchanges of support vary across different demographic groups. Gerontologists have looked at how flows of support change as households age. But there is also a large literature on how race and ethnicity impact support; in particular, material exchanges of financial support. Some of this work focuses on how differences in family structure may play a role in support. For instance, there is some evidence that the odds of any one child receiving financial support are negatively impacted in families with a greater number of children (Altonju, Hayashi and Kotlikoff 1996). When they do receive support, amounts provided are lower (Fingerman et al 2009). There is also a growing acknowledgement that family members outside the household (e.g. grandmothers, cousins, and extended kin) play an important role in the financial well-being of households (Cox and Fafchamps 2008; Cox and Stark 2005; Ebaugh and Curry 2002; Mare 2013).

Other research documents the distinctive patterns of minority households versus white households. While the qualitative literature seems to indicate that minority households, and Latino and black households in particular, are more likely to provide financial support, this is less clear in large scale surveys. For instance, Lee and Aytac (1998) find distinctly less support provided in black and Latino families, both in terms of frequency and the amount given. Some of the differences in support are attributed to difference in financial resources. The substantial difference in the wealth holdings of black and white households is by now well documented, and

there is some indication that black financial support to kin may play a role in maintaining the gap (Chiteji and Hamilton 2005; O'Brien 2012). The white/black differential in financial support disappears once net worth is controlled for (Berry 2006; Sarkisian and Gerstel 2004).

Studies of financial support, despite looking at wealth and income effects, do not incorporate more detailed financial information. But measures of debt, and the availability of credit, may strongly affect the provision of financial support. This is particularly important for understanding how network financial support impacts household asset accumulation – though white and black differences disappear with wealth controls, it may be that black households are more likely to support in the face of financial struggles. This would bolster research identifying heterogeneity in the economic well-being of black families as a possible source of wealth differentials (Chiteji and Hamilton 2002; Heflin and Pattillo 2006).

Perceived Support / Private Safety Nets

For those who receive these transfers, financial support is often characterized as a "private safety net" (Eggebeen and Davey 1998; Henly et al 2005; Ebaugh and Curry 2000). For some households, inter vivos transfers help households make it from check to check (consumption smoothing) when financial emergencies or budgetary shortfalls emerge. And there is plenty of research showing the benefits of access to this "private safety net". Perceived support is associated with more rapid exit from welfare for low income mothers (Harknett 2006). It is also correlated with reduced levels of material hardship and poverty, and can help avoid more expensive forms of consumer credit, such as pawnshops (Henly, Danziger and Offer 2005).

Households with lower levels of economic resources may be less likely to perceive support, particularly because their networks will contain members whose financial position

resembles their own. For instance, Turney and Harknett (2010) found a negative association between neighborhood poverty and the provision of material support. Harknett and Harnett (2009) directly tied low income to lower odds of perceiving financial support.

But much like the provision of support, the full financial position of the household is rarely accounted for in models predicting perceptions of support. If lower income households are more likely to have lower income networks, one possibility is that these networks may include a greater proportion of individuals who require help. As a consequence, they might be less likely to believe they have access to support. And households that have been shut out of main stream credit markets may find it more difficult to get assistance from their friends and family, who may have either been overtaxed already, or be concerned about having loans repaid. Similarly, households that frequently overspend may find that their poor budgeting techniques signal to their networks that either loans or gifts would be poorly used, and thus they also would not perceive support.

In what follows, I use the 2007 Survey of Consumer Finances to build three different models to capture the dynamics proposed above. First I model perceptions of financial support from friends and family, building on demographic and financial information up to race, measures of financial struggles, and interactions. I first use a two-stage heckman model to investigate the provision of financial support to friends and family, followed by a model where I look at the provision of financial support to adult children. In each case I first specify a selection model, which uses a probit analysis to predict whether the household has provided support. The error term for this model is then entered into the OLS regression in the second stage, which analyzes the logged amount of financial support provided. I transformed the amount provided in financial support variable using the log transformation because of the large positive skew.

Data and Methods

I use the 2007 Survey of Consumer Finances (SCF) to investigate perceived financial support and the provision of financial support. The SCF is a triennially collected survey of American households that uses a two-stage sampling design with both standard multistage area probability sampling as well as a list sample, based on information provided by the IRS (Kennickell 2005). The multi-stage sampling design is representative of the US population with respect to a number of characteristics. The response rate for this portion of the sample was 68 percent (Kennickell 2008). The IRS sample list is used to access high wealth households, and these are oversampled. These data, when used with the proper weights, present perhaps the best representation of the overall distribution of wealth in the US.

The unit of analysis in the SCF is the principle economic unit, but for all intents and purposes this maps on to a household of economically interdependent occupants. Demographic information refers to the respondent—the economically dominant or more knowledgeable adult member of the household. The head of the household is defined as the adult male household member. Complete demographic data is not available for every household member. The 2007 SCF, while conducted throughout 2007, asked respondents about 2006, thus the data represents the financial position of households before the onset of the financial crisis or "great recession" [16].

There are three primary dependent variables used in this analysis. The first is a measure of perceived financial support, which asks:

> "In an emergency could you or your (husband/wife/partner) get financial assistance of $3,000 or more from any friends or relatives who do not live with you?"

[16] Though most questions were asked about 2006, the survey was in the field from roughly early May 2007 until late March 2008. This represents the beginning of the financial crisis, though many of the questions used in this analysis are moored in specific periods (e.g. 2006), and should not be affected by this.

I also look at two measures of providing financial support. The measure for whether or not the household has provided financial support is:

> "During 2006, did you (or anyone in your family living here), provide any (other) financial support for relatives or friends who do not live here?"

This is followed by a question asking about how much financial support was provided.

> "How much support did you pay?"

In addition, the 2007 SCF asked respondents to say who they gave financial support to, which included the following options (respondents were able to select more than one): Children under 18, Children over 18, Parents (including in-laws), Grandchildren, Grandparents, Siblings, Niece/Nephew, Friends, and Other.

Main Independent Variables

Financial Resources

I use the household's position in the distribution of total household income, measured using household income quintiles. Previous research has shown that while individual members of a household do make decisions about the provision of support, these decisions typically come from pooled household resources (Bianchi et al. 2008). I also use a measure of the household's position within the distribution of net worth divided into quintiles. For both wages and net worth, I have limited my analysis to low and middle income households earning less than $80,000.

In models for providing support, I also use the household's quintile position with respect to its debt service ratio. This was computed by summing up all payments on all outstanding debt on an annual basis, and then dividing by the household's total annual income. This figure also includes rent.

Financial Struggles

I use two measures of financial struggles. The first is whether the household spent more than its income in 2006. The second is a credit constraint variable constructed from two different variables: whether the household has been turned down for credit in the last five years or didn't get enough credit, and whether anyone in the household did NOT apply for credit. If the household responded yes to either being denied credit, or not applying for fear of rejection, it was coded as credit constrained.

Network Variables

Aside from the network financial variables, I include measures that try to capture differences in network structure. I use one variable to look at the total size of the family's network. This simply sums up the total number of living parents for all household residents, and the total number of siblings. I use similar measures in different models – one that counts the number of children over the age of 25 (for models of financial transfers to grown children). Another variable looks at the total number of recipients of financial support the respondent identified as providing for. I also include a measure of whether the household is planning on leaving a bequest, as this has been shown to affect rates of inter vivos transfers (Kuhli 2004).

Method

Because perceived financial support is a straight-forward binary variable, I use a simple logistic regression model to test the effects of family size, household composition, and financial position on whether or not the household perceives financial support. For perceived support and the amount of support provided, I use a heckman two-stage probit-OLS analysis. Heckman models are used to control for selection effects, meaning that not everyone provides support, and thus estimates of the effects of the IVs on the DV should be included or risk biasing the ultimate

estimates. This technique proceeds in two stages. The first uses a probit analysis of whether the household provides financial support to anyone outside the home. The second stage uses the results of the probit analysis to 'correct' OLS estimates of the effects of the IVs.

The heckman two-stage model assumes that the error terms of the two equations (equation one estimates whether the household provides support, and equation two estimates the amount of money given in support) are correlated. The second stage of the heckman models incorporates the expected error of the first stage as an independent variable, which removes possible bias.

Analysis

I proceed in three steps, taking each type of network relation in turn – perceived support, inter vivos transfers to friends and family, and inter vivos transfers to adult children. For each, I begin with descriptive statistics before turning to the multivariate results. For perceived support, I briefly discuss some descriptive results before turning to a series of logistic regressions. The outcome of interest is the dichotomous variable predicting perception of financial support. For providing financial support to friends and family and to grown children, the outcome of interest is the provision of financial support, and the logged amount provided.

Results

Descriptive Analysis

Table 1 provides descriptive statistics for all variables used in the analysis. For income, savings, and net worth quintiles, it gives the dollar values of the means of each quintile. For debt service, the table shows the average percentage of annual income taken up by financial

obligations. Bear in mind that though the sample is truncated by income, no other variables are used to exclude cases. The average level of education for LMI households is some college, and heads of households are on average about 50 years old. Half of the households are single (not partnered for any reason), nearly 30 percent have at least one child, and roughly 30 percent are headed by a minority. In terms of financial struggles, nearly 20 percent have been denied credit in the last five years, and over 20 percent have overspent in the last year (2006). The average number of people supported, including all the possible recipients the SCF asks about, is 0.17. The average size of a household's network, summing up siblings and parents, is roughly seven people.

With respect to the dependent variables, 60 percent of households report perceiving financial support, while 5.7 percent have provided financial support to an adult child living outside the household, and 9 percent have given money to support friends or extended family. The average size of transfers is $985, though the average among those that have provided a transfer is much larger, nearly $6900. This can also be expressed as a percentage of total income. Transfers were on average 2.4 percent of the households' total income. Among those who had given a transfer, the mean was almost 17.6 percent.

Perceptions of Financial Support

Table 2 shows that the percentage of low and middle income households who perceive financial support steadily increases over quintiles of both income and net worth. There appears to be a strong positive correlation between income and net worth and perceptions of financial support. Our two measures of financial struggles, credit constraint and overspending, do show statistically significant differences. Those experiencing financial struggles are roughly 10 percentage points less likely to perceive financial support from friends and family. But these

households experiencing financial struggles may have fewer resources, thus we can turn to the multivariate models to help control for additional factors.

Table 3 provides the results of a set of logistic regression models. For each variable, the odds ratios are presented. Odds ratios greater than one mean that a one-unit change in the independent variables provides a multiplicative change in the odds of the outcome.

Model 1 is the baseline that shows the effects of basic demographic variables such as education, age, age squared, whether the household is single (with partnered/married households as the reference group), and whether the household has any children under age 18 (households without children are the reference group). Finally, the household's position within quintiles of the total income distribution among low and middle income households is included. All variables are significant. Education increases the odds of the household perceiving support, net of all other variables. Contrary to work on "private safety nets," single households and households with children are both less likely to report having financial support, roughly 25 percent less than their reference category. And as income climbs, so too do the odds of perceiving financial support.

Model 2 adds in the race dummy variable, household's net worth quintile, and the size of the household's family network. Previous research suggests that patterns of financial support differ substantially across racial groups. Because of the relatively small sample sizes for the different racial and ethnic groups in the Survey of Consumer Finances, I used a dummy variable indicating whether the household has a minority member, with all-white households being the reference group. Households with a member who self-identifies as a minority see their odds of having financial support decrease by about 40 percent. This effect is significant. I hypothesized that net worth should mediate the effect of income, which is indeed what has happened here—the effect of the household's income quintile has been reduced. Both income and net worth are

positive predictors of having financial support. The total size of the network—which sums the total number of parents alive, number of siblings, and number of grown children living outside the household—was hypothesized to a have a significant positive relationship with having financial support. While the effect is in the right direction, it is very weak, and not positive.

Model 3 introduces two additional variables: whether the household is credit constrained and whether the household overspends. Credit constraints in particular might lead households to need to borrow from friends and family. I hypothesized that the presence of credit constraints should increase the odds of perceiving financial support after controls, as these households would be more likely to have sought out assistance and would be in greater need than non-credit constrained households. There is no support for this hypothesis—a household that has been turned down for credit in the last five years has the odds of perceiving financial support reduced by almost 25 percent, a significant effect at the 0.05 level. I also introduced whether or not the household overspends. Households with poorly managed finances may not be able to rely upon financial support from their networks, but these also may be the households that should be more in need of financial assistance. Households that overspend reduced the odds of having financial support by 35 percent. Thus, both measures of financial strain lead to lower levels of financial support.

Model 4 tests additional hypotheses regarding single households with children, and further explores racial dynamics in perceiving financial support. If private safety nets are robust sources of support for single-parent households, then there should be a positive effect of the interaction net of controls. In other words, needier households should be more likely to report perceiving support. In prior models we saw that single households and households with children are less likely to report financial support, though by Model 3, neither was significant. The

introduction of the interaction is not significant, but most tellingly the direction of the effect is that it reduces the odds of financial support, net of controls. We also saw that minority households are less likely to report perceiving financial support, consistent with previous research (Cox and Jappelli 1990; Lee and Aytac 1998). I interacted race with net worth, overspending, and credit constraints, to see if the effects of these variables might also vary by race. But in no instance was the interaction of these variables significant. Surprisingly, however, the race interactions did change the direction of the main effects – in isolation, being turned down for credit reduced the odds of perceiving financial support, but when interacted, the effect goes in the opposite direction, indicating that credit constrained minority households, and to a lesser extent, minority households that overspend, are *more* likely to perceive financial support. Nevertheless, these effects are not significant.

Provision of Financial Support to Friends and Extended Family

Table 4 shows basic descriptive data on the rates of inter vivos transfers and the average size of transfers. The percentage of households providing transfers to friends and extended family members living outside the home increases with income, and to a lesser degree net worth, though the relationships are much less clear than we saw with perceptions of financial support. In terms of liquid assets (savings), the percentage displays no clear trend, and remains relatively flat across changes to the debt service ratio. Credit constrained households do appear to be more likely to provide a transfer, but the difference is small (~1 percentage point) and is not statistically significant. Overspenders are less likely to provide support, and here again the difference is small (~2 percentage points) and only marginally significant ($\alpha < 0.1$). There is, however, a fairly large difference by race, with minority households significantly more likely to provide transfers to friends and extended family members.

Looking at the amounts provided (in parentheses), there does not appear to be a clear trend with income or debt service, but net worth and liquid assets do seem to show a positive relationship with the size of the transfer. While credit constrained households don't appear to be Any different in their frequency of giving, there is a nearly $4500 difference in the size of the transfer. Households that report overspending, provide only about $1600 less than households that do no overspend. Minority households, though they may be more likely to provide a transfer, give a smaller sum, by approximately $1,000. However, this difference is not statistically significant.

Table 5 gives the results of a heckman two-stage model that uses a probit model to predict whether the household provides a financial transfer to a friend or extended family member, and then uses the errors to help take into account selection issues in looking at the amount provided. The selection equation is given first, which is on the upper portion of the table. Surprisingly, few of the demographic variables are significant predictors of provision, though both race (a household headed by a minority) and income increase the likelihood of an inter vivos transfer, net of controls. Many of the other effects, though not significant, *are* in the direction one would expect – education increases the likelihood of a transfer, as does net worth. With respect to the financial struggles variables, the results are mixed—overspending decreases the likelihood of a transfer, as one would expect, but credit constraints increase it, as does increasing debt service.

Below that are the error-corrected estimates of the logged amount provided in a transfer. Once again, the resource variables are important—both income (marginally significant) and wealth increase the size of transfers. Savings decreases it, oddly, but this effect is not significant. Interestingly, our financial struggles variables are contrary to expectations—households that

overspend provide slightly more, and those with higher debt servicing provide more, though neither effect is close to significant. The size of the network, and thus the possibility of multiple demands for money, is also not significant, but the number of recipients actively supported does increase the size of the transfer significantly.

Financial Transfers to Adult Children Outside the Household

Table 6 shows that the percentage of households that provide a financial transfer to grown children increases across income, liquid assets, and net worth quintiles. The univariate results for measures of financial struggles are mixed. As the debt service ratio (how much of a household's income goes to servicing debts and rent) increases, the percentages of households providing financial support bounce around with no clear trend. One would expect the percentage to decrease as the debt service ratio increases, which would indicate less disposable income with which to provide a transfer. Interestingly, a larger percentage of those who are credit constrained provided a transfer (a 4 percentage point difference), and with respect to households that overspend, a whopping 19 percent of households have provided a transfer, versus just 9 percent of non-credit constrained households. And there is little difference between white and minority households.

With respect to the amount provided in transfers (the averages include those who did and did not give a transfer, not just among transfers provided), the pattern is quite similar to whether or not a transfer was provided. Amounts provided rise over quintiles, with some bouncing around for income. Again, the effect of the debt service ratio should lead to smaller amounts provided, but no clear trend is evident. Households that are credit constrained, though they may be more likely to provide a transfer, provide substantially less in inter vivos transfers. This is consistent with households that have "reserves", in the form of access to credit markets, being willing to

give more. Interestingly, overspending does not seem to have an effect on how much is provided in transfers, as the amounts are quite similar. Finally, white and minority households give about the same in terms of the average size of transfers.

Table 7 gives the result of a heckman two-stage model, which is a model used to help control for selection effects in the phenomena under study. In this instance, we are interested in the financial behaviors that effect the provision of financial support to older children outside the household. The model does this in two steps – first, it uses a selection equation for the factors that determine if financial support is given. The error term in this model is then used in estimating the factors that affect the amount of support given. In this way, the factors affecting the decision to provide financial support are built into the estimates of the amount of support given. In this case, we were interested in how the provision of financial support is impacted by net worth, as well as by measures of financial pressures—the level of the household's debt servicing as a percentage of their income, whether the household is able to get additional credit, and whether the household overspends.

It's worth noting that many of the demographic and control variables are not significant, though the effects are generally in the direction anticipated. Both income and wealth increase the odds of a transfer, while households with children and minority households are less likely to provide a transfer. Interestingly, single households (unmarried, divorced, or widowed) are more likely to provide a transfer, while more educated households are less likely. Again, overall, none of these effects is significant at any commonly used threshold.

We were here primarily concerned with how measures of the household's financial strain would impact the flows of financial support to children outside the household. We focused on households with children over age 25 to focus less on educational transfers and more on transfers

that operate as a safety net—when resources are given to households that are liquidity constrained. We used three measures of household financial strain—the household's debt service as a ratio of its income, whether the household has been turned down for credit (credit constrained), and whether the household reported spending more than it earned in the last year. Of these, only whether the household overspends is a significant predictor of providing financial support, and, surprisingly, it *increases* the odds of providing financial support. Of course, it is difficult to know which way the causality runs – are households that overspend more likely to "spend" in giving financial assistance to children? Or did these households overspend *because* they provided financial assistance? Intuitively, the answer seems the latter. But being credit constrained *also* increases the odds, though the effect is not nearly as significant. The household's debt service does show an effect consistent with financial struggles decreasing the odds of providing financial transfers. Increasing debt service ratios lead to lower odds of providing a transfer, net of all control, though again the effect is not significant.

Households reporting that it was very important to leave a bequest were, contrary to expectations, much *more* likely to provide financial assistance. Previous research has proposed that a desire to leave a bequest might lower the desire to provide inter vivos transfers as households may be reserving their resources for assets that will be transferred over to progeny when their wills are executed. The SCF question, however, may have picked up on whether households think it is important to support children more generally, which would include inter vivos transfers of financial support. Thus it may simply be a proxy for prioritizing supporting children financially.

The results for the second stage of the heckman model, an OLS model for the logged amount provided in the transfer, shows a similar set of results, in that few variables are

significant, though many of the effects are in the direction hypothesized. Some interesting discrepancies do exist between the tobit/probit results and the OLS results, in particular the effect of opinions on bequests. In the selection model, bequests raise the odds of providing a financial transfer significantly, while in the OLS regression, those who think it is very important to provide a bequest provide substantially less in transfers, though the difference in not significant. Note also that while overspending increased the odds of an inter vivos transfer, it slightly reduced the size of the transfer. Being credit constrained increased the odds of a transfer, but decreased the size of the transfer, while debt service had the opposite effect, decreasing the odds, but increasing the amount of transfers. Neither effect is significant.

Only the number of children over age 25 living outside the household significantly predicts the size of the transfer. This is most likely a consequence of the structure of the question in the SCF, which asked not about the size of each transfer, but rather the total sum transferred to all recipients. In other words, having additional children doesn't necessarily raise the average size of the transfer, but appears to increase the number of transfers.

Discussion

This analysis was oriented towards understanding the role of household financial pressures in the perception of financial support and the provision of financial support to grown children and other family members, among low and middle income households. I hypothesized that households with greater levels of financial pressure may be more aware of the financial resources available to them, and may have been forced to access these resources, thus financial strain may not decrease perceptions of support. Alternatively, if households experiencing

financial pressures are themselves surrounded by those with financial pressures, there would be a positive relationship between various measures of financial pressures and perceptions of support.

The first models looked at the role of demographic variables. These showed that more educated, higher income, higher net worth households are significantly more likely to perceive financial support. There are also some non-linear effects regarding age. Unlike previous work, minority households in the Survey of Consumer Finances are substantially less likely to perceive financial support, even when controlling for differences in family sizes as a proxy for family organization.

To look at the effect of financial strain, I introduced two measures: whether or not the household spent more than it earned last year (2006), and whether the household is credit constrained (if it has been turned down for credit in the last five years). Both of these are associated with substantial reductions in the odds of perceiving financial support. I also interacted these with race to see if their effects differ for non-minority households, but no interactions were significant.

I performed a similar analysis on providing financial support, and on the amount of support provided. I used two-stage heckman models to control for the selection effects of whether or not the household provided a transfer. In the selection equation, only two variables were significant: whether or not the household thought it was very important to provide a bequest, and whether the household overspent in the last year. Interestingly, those who overspent had lower average amounts given, as did those who thought it was important to provide a bequest, but in neither case was the difference significant. It should be noted, however, that in the absence of controls, households that overspent gave roughly similar levels in inter vivos transfers to children. Only the number of children outside the household over age 25 was a

significant predictor of the amount of money provided in financial support. While on one hand this is a by-product of the fact that the SCF does not ask about the number of transfers, it also seems to indicate something else: households with multiple grown children who live outside the household provide funds to more than one of these children.

The bequest variable, then, may simply be an indicator of a high degree of concern for the well-being of progeny, rather than a strategic decision regarding the transfer of assets to children. In terms of overspending, it's possible that what is captured is the fact that the inter vivos transfer *itself* forced the household to overspend. But the similarity in the amount given between non-overspending and overspending households suggests that, in some circumstances, households that are on the border between being in the black and being in the red are *more* likely to give a transfer.

Limitations

The biggest drawback of the SCF with respect to investigating patterns of intergenerational support is not having data on the recipients of transfers. This creates the possibility of omitted variable bias. Two issues in particular stand out. The first is the absence of data specifying need on the part of recipient households. Households that do have the financial wherewithal to provide financial support may not in the absence of the need on the part of progeny or kin. To some degree, the use of the heckman two-stage model, which tries to correct for selection effects, may capture *some* of the effects of omitted variable bias, to the degree that the variables in the selection equation are fair proxies for having a child in financial need. In addition, some work (Cox 2003) has shown that the income of receiving households is not a useful predictor of received support, so the primary issue is the issue of need.

Typically, financial support is but one dimension of a host of different types of support that flows within families. Unfortunately, the SCF asked only about financial support, and not about other forms of material support, and certainly not exchanges of emotional or symbolic help. To the extent that these flows are correlated, models predicting support and amounts of support may be biased. Previous work has found small correlations between financial help and the amount of time given in helping, but not in emotional or psychological support (Sarkisian and Gertel 2004).

Another problem is of course the cross-sectional nature of the Survey of Consumer Finances. McGarry (2012) has argued that static models of transfers poorly capture the inconsistent and varied provision of financial support. This is consistent with Berhman, Pollack and Taubman (1995) who find that support provision is inconsistent and primarily oriented towards needy households. McGarry and Schoeni (1995), using the AHEAD data, also find that transfers go to the most needy children, and that these children receive the largest amount of transfers.

Conclusion

In previous chapters, we have seen that low and middle income households are more likely to face financial struggles, and to have fewer resources to deal with them. In this chapter, we looked at whether these financial difficulties impacted the help they felt they could get from others, and the help they provided to others. Perceptions of support were primarily driven by income and net worth, and were largely unaffected by the household's financial struggles. But the provision of support was *more* likely among those households who overspent, net of controls.

This seems to indicate that households that are struggling may be less able to turn to others for support. Nevertheless, they may be more likely to provide aid to children who are presumably struggling.

Table 1: Descriptive Statistics for Variables used in the analysis

Quintiles	1	2	3	4	5
Income ($)	9240	21247	33047	47077	66639
Savings ($)	25	561	1941	5560	75075
Net Worth ($)	-8340	8928	47497	147531	+250,000
Debt Service (%)	4.4	17.4	29.4	39.9	70.4

	Mean	**Std. Dev.**
Education	12.8	.06
Age	49.5	.37
% Minority	.29	
Single	.499	
Child in the HH	.267	
Very Important to leave Bequest	.259	
Credit Constrained	.192	
Overspent	.213	
Number of People Supported	.17	
Kids Over age 25	1.1	
Total Network Size	7.2	
<u>Dependent Variables</u>		
Perceive Financial Support	.608	
Support Adult Children	.057	
Support Friends or Extended Family	.090	
Amount Provided	985	153
Amount Provided, if providing	6890	1015
Amount Provided, % of total income	2.4	.42
Amount Provided, % of total income, if providing	17.6	2.9

Table 2: Percentage of Households Engaged in Network Financial Relationships by Income, Net Worth, Credit Constrained, and Overspending (n=2390)

Income Quintile	48	52	59	70	77
Net worth Quintile	38	56	61	67	82
Not Credit Constrained	62***				
Credit Constrained	53				
Does Not Overspend	63***				
Overspends	51				

*** Difference is statistically significant at the .001 level

Table 3: Logistic Regression of Perceiving Financial Support, n=2390

	Model 1	**Model 2**	**Model 3**	**Model 4**
Education	1.16***	1.12***	1.13***	1.13***
Age	.941***	.919***	.924***	.924***
Age Squared	1.00***	1.00***	1.00***	1.00***
Single HH	.761***	.957	.924	.959
Child in HH	.757***	.796*	.821*	.869
Income Quintile	1.33***	1.20***	1.19***	1.18***
Race Dummy		.605***	.602***	.463***
Net Worth Quintile		1.41***	1.39***	1.37***
Total Family Size		1.02	1.01	1.01
Overspending			.651***	.637***
Credit Constrained			.783**	.700**
Single X Child				.870
Race X Net worth				1.08
Race X Overspending				1.10
Race X Credit Constrained				1.36

Table 4: Percentage of Households Providing Financial Support to Friends and Extended Family, with Mean Amount Given by Income, Net Worth, Debt Service Ratio, Savings, Credit Constrained, Overspending, and Race (n=2390;215)

Income Quintile	6.7 (12663)	6.6 (2220)	8.0 (2810)	10.7(2910)	12.1(8960)
Net Worth Quintile	8.9 (1760)	8.7 (2680)	7.2(2800)	9.4 (4280)	10.0 (14970)
Liquid Asset Quintile	7.6 (1615)	4.5 (2470)	11.2 (3670)	9.9 (8095)	11.2 (10910)
Debt Service Ratio Quintile	6.8(5725)	9.4 (4210)	9.1 (3400)	9.0 (3080)	9.9 (6435)
Not Credit Constrained	8.6 (7035)				
Credit Constrained	9.8 (2630)				
Does Not Overspend	9.2* (6370)				
Overspends	7.5 (4685)				
White Households	7.7 (6390)				
Minority Households	11.5 (5500)				

*statistically significant difference at the .100 level

Table 5: Heckman Estimates of Providing Financial Support to Friends and Extended Family, and Log Amount of Support Provided, n=

Selection Variables	**Coefficients**	**Std. Error**
Education	.0210	.0148
Race	.2284**	.0833
Age	-.0169	.0125
Age sq	.0001	.0001
Single	.0575	.0826
Child	-.0334	.0933
Net worth	.0746	.0340
Income	.0454**	.0337
Credit Constrained	.0940	.0970
Overspends	-.1166	.0972
Debt Service	.0131	.0297
OLS estimates		
Race	-.0074	.2134
Single	.2199	.2029
Child	-.4382**	.1839
Income	.1561*	.0845
Savings	-.0124	.0795
Net Worth	.2038**	.0756
Credit Constrained	-.0329	.2042
Overspends	.0027	.2320
Debt Service	.0364	.0661
Network size	.0343	.0225
# supported	.2771**	.1048

Table 6: Percentage of Households Providing Financial Support and Mean Amount Given by Income, Net Worth, Debt Service Ratio, Savings, Credit Constrained, Overspending, and Race (n=938;112)

Income Quintile	6.3 (20535)	6.6 (5860)	11.3(15630)	16.7 (5380)	15.0 (12705)
Net Worth Quintile	7.3 (1900)	5.9 (2075)	11.1 (3970)	10.9 (6190)	13.4 (20215)
Liquid Asset Quintile	5.2 (1265)	7.1 (5670)	8.8 (4770)	15.2 (10830)	14.6 (18541)
Debt Service Ratio Quintile	10.0 (14690)	11.5 (9085)	8.0 (4850)	13.9 (5000)	10.4 (13070)

Not Credit Constrained	10.3 (12950)
Credit Constrained	14.5 (3345)
Does Not Overspend	8.5 (13005)
Overspends	19.2 (8935)
White Households	10.5 (1732)
Minority Households	11.5 (1780)

Table 7: Heckman Estimates of Providing Financial Support and Amount of Support Provided, n=978

Selection Variables	**Coefficients**	**Std. Error**
Education	-.0277	.0210
Race	.0931	.1480
Age	-.0565	.0585
Age sq	.0003	.0005
Single	.194869	.1246
Child	-.1947	.2578
Bequest	.2923**	.1275
Net worth	.1997**	.0644
Income	.1979**	.0570
Credit Constrained	.1589	.1853
Overspends	.4898***	.1352
Debt Service	-.0196	.0441
OLS estimates		
Race	.239	.393
Single	-.094	.321
Child	-.499	.647
Bequest	-.305	.342
Income	-.042	.137
Savings	.174	.109
Net Worth	.324	
Credit Constrained	-.582	.443
Overspends	-.713**	.353
Debt Service	.048	.107
# Kids>25yo	.148*	.078

Chapter 4

Embedded Transactions: Financial Support and Payday Borrowing

The New Economic Sociology has its roots in networks (Granovetter 1974) and household finances (Zelizer 1990), but this ground has recently been ceded to economists and demographers. However, the relationship between network transfers and household decision making is particularly fertile ground for scholars to investigate the intersection of networks, resources, norms, and financial well-being. Network members assist households in making choices about investments (Chang 2005) and even routine decisions such as consumer purchases (DiMaggio and Louch 2005). But what may be particularly interesting for economic sociologists is the role financial transfers play in household maintenance and support (e.g Edin and Lein 1997a).

In this paper, I build on previous work on financial transfers to examine the role of networks in the controversial credit practice known as payday borrowing. Networks of financial support provide households with a buffer against costly outcomes. Payday loans are high-cost, short-term loans households use when faced with emergencies and cash shortfalls. Households with financial support should be less likely to take out expensive payday loans, as borrowers should prefer financial assistance from friends or relatives where available. At the same time, for those providing funds, transfers of support may be a source of financial strain. Thus, I argue that having access to financial support should decrease the need for emergency credit, and that the *provision* of financial support can increase the need for emergency credit.

Using a new question in the 2007 Survey of Consumer Finances (SCF) about payday borrowing, I investigate the role of financial support networks in household financial decisions. I

show that perceived access to, and the provision of, financial support impacts rates of payday borrowing, even among resource constrained households. I then further test the relationship with a series of multivariate logistic regression models. These models make clear that there is a substantial and significant effect on the odds of taking out a payday loan if a household is providing financial support to others, even after controls for household, demographic, and financial factors.

Private Safety Nets and the Downside of Social Support

Many individuals and households, at some point, rely on assistance from friends or family. The flow of resources across networks, typically referred to as "social support," often act as a buffer for households that are faced with crises, such as mental or physical illness (Thoits 1995). Social support is also crucial for families facing material hardship, as money provided by networks allows households to "smooth" their consumption in times of financial constraints. Financial support often takes the form of intergenerational transfers—money from parents to progeny. Parents provide the bulk of financial transfers, and also provide larger sums than support from other sources (Wellman and Wortley 1990; McGarry and Schoeni 1995; Schoeni 1997; Schoeni 2002). Older parents may also receive financial transfers from children, but this is less common (e.g. Wong, Capoferro, and Soldo 1999). Household networks, however, extend beyond parents, to include siblings, grandparents, friends and fictive kin (Stack 1974; Ebaugh and Curry 2002).

Moreover, receiving social support can influence decision-making, particularly in how households respond to financial difficulties. For instance, Harknett (2006) found that social support helps families more quickly exit welfare. Henly, Danziger and Offer (2005) found that

social support among low income households reduced material hardship and poverty. In addition to social support, networks may also provide direct cash transfers, which can be used to avoid late payments on bills (Wu and Eamon 2010). Consistent with the hypothesis being tested here regarding the positive effects of access to financial support, it has been demonstrated that transfers help households avoid expensive credit options, such as pawnshops (Henly et al. 2005). Because these funds can help bridge financial gaps at prices lower than borrowing costs, households should prefer network funds to high cost credit alternatives. It is through these channels that financial transfers can impact the demand for credit, and emergency credit in particular.

Though receiving support can have beneficial effects for households, providing support may be costly. For example, the provision of emotional and instrumental support has long been acknowledged to negatively impact the physical and mental well-being of providers (Aneshensel, Pearlin, and Schuler 1993). The same may hold true for households providing financial support. Studies of the impact of financial transfers on providers has tended to focused on issues such as extensions of labor force participation (e.g. Soldo and Hill 1995), but transfers may impact the households financial reserves and asset mobility. This is particularly true in networks where there is greater economic heterogeneity among family members and efforts to help poorer kin may have adverse effects on providers' financial well-being. Heflin and Pattillo-McCoy (2002) show households with poorer siblings are less likely to have a bank account or own a home. Similarly, Chiteji and Hamilton (2005) show that having a sibling and parent in need is associated with lower chances of having a bank account and owning stock, as well as reducing asset accumulation. However, these studies are limited in that they do not measure transfers. Instead their underlying assumption is that households with siblings or parents in need are more

likely to provide financial transfers to aid them, which negatively impacts their financial well-being. I use the SCF questions about financial support to show the direct relationship between financial transfers and financial well-being.

The qualitative literature provides some illustrative examples of this process: network members with resources are called upon to render aid, to the detriment of their own goals. For example, Carol Stack's ([1974]) 1997 respondents received a large life insurance payment which they planned to use for a down payment on a new home. Other network members in need of assistance quickly made claims to the money, and after providing support the family could no longer afford the down payment on their home. Whether because of previous transfers received, or norms of reciprocity and support, households can put their own financial plans in jeopardy to assist network members.

There is also evidence suggesting that the financial strains associated with providing support is more common than currently thought. Sherraden, Schreiner and Beverly's (2003:107) study of low-income earners in a new savings program provides a good example of this. Participants placed savings into accounts with large financial penalties for withdrawals. In interviews, respondents said they appreciated the withdrawal penalties *as it gave them a reason to say no when friends or family asked for money*. Penalizing withdrawals helped households save more, and provided a form of "symbolic illiquidity" with respect to network demands on funds. While Sherraden et. al (2003) explicitly questioned whether the participants networks were adversely affected by this illiquidity, they did not ask whether network demands had adversely affected the financial position of the program participants. Rather, these responses emerged unprompted, implying a recognition of the potential hazards in providing financial

support. These costs may be so salient that, as in this case, *barriers to providing financial support are deemed beneficial*.

Emergency Credit – Payday Borrowing

When faced with last minute financial difficulties, households with limited resources often turn to payday loans to bridge their budgetary gaps. Payday loans are short term, unsecured loans generally less than five hundred dollars. Borrowers pay dearly for such loans, as fees are typically $15 for every $100 borrowed. Because the term for these loans is never more than two weeks, the annualized percentage rate is quite large ~ 390 percent. Payday borrowing has become big business—the Consumer Financial Services Association of America reports that over 20,000 payday locations gave out $38.5 Billion in short term loans to 19 million households (CFSAA, n.d.). Estimates of the number of payday borrowers range from 2 to 6 percent of US households (Apgar Jr and Herbert 2006; Lawrence and Elliehausen 2007). Payday lenders, and other "alternative" financial service providers, are now common in many low and moderate income minority communities. Perhaps as a consequence, blacks are particularly over represented among borrowers (CDC 2008; Gallmeyer and Roberts 2009; Graves 2003; Temkin and Sawyer 2003).

Why would borrowers accept such unfavorable terms? First, despite the costs, payday loans can be less expensive than service disconnects or overdrafts and late fees when used properly (Elliehausen 2009; Stango and Zinman 2009). The question of why household don't use other alternatives is particularly vexing given that the majority of payday borrowers are not destitute and often have middle class incomes—ranging up to $50,000 per year. A substantial proportion also have credit cards (Apgar Jr and Herbert 2006). However, borrowers often report

few savings and though many have credit cards, they tend to have little available credit (Elliehausen 2009; Elliehausen and Lawrence 2001). This may be due to overspending, as there is evidence that payday borrowers have greater levels of debt servicing payments than non-borrowers (Elliehausen 2009). In addition, many borrowers are credit constrained—they are unable to get additional credit[17] (Elliehausen 2009; Elliehausen and Lawrence 2001; Stegman and Faris 2003). Payday lenders run no "formal" credit check, making them a viable option for those who have been turned down for credit elsewhere.

To summarize, the literature on social support suggest that when households encounter emergencies, their networks help them to avoid the worst consequences. In the absence of financial support, households facing monetary problems might turn to payday loans. This is particularly true for households that are unable to get additional credit. I expect that payday borrowers are more likely to be credit constrained. In addition, households with greater levels of savings and available credit should be less likely to take out a payday loan, as they can use these resources as a "buffer" against emergencies. Households that overspend, and with greater debt to income ratios, might also be more likely to take out a payday loan. Finally, given the high costs of payday loans, households should prefer to borrow from networks when available. Thus, there should be a negative relationship between perceived financial support and payday borrowing. Conversely, households that are *providing* financial support can face additional financial difficulties. Here, the provision of financial support should be positively associated with payday borrowing. By examining how network relations affect borrowing behavior, we can understand both the positive and negative aspects of financial support networks, as well as better understanding the financial and network position of payday borrowers.

[17] I use the term "credit constrained" to mean difficulty in obtaining credit. Households that have little savings, and no access to credit markets I consider "liquidity constrained" – they have little liquid reserves of any form.

Data and Methods

I use the 2007 Survey of Consumer Finances (SCF) to investigate perceived financial support and the provision of financial support. The SCF is a triennially collected survey of American households that uses a two stage sampling design with both standard multistage area probability sampling as well as a list sample, based on information provided by the IRS (Kennickell 2005). The multi-stage sampling design is representative of the US population with respect to a number of characteristics. The response rate for this portion of the sample was 68 percent (Kennickell 2008). The IRS sample list is used to access high wealth households, and these are oversampled. These data, when used with the proper weights, present perhaps the best representation of the overall distribution of wealth in the US.

The unit of analysis in the SCF is the principle economic unit, but for all intents and purposes this maps on to a household of economically interdependent occupants. Demographic information refers to the respondent—the economically dominant or more knowledgeable adult member of the household. The head of the household is defined as the adult male household member. Complete demographic data is not available for every household member. The 2007 SCF, while conducted throughout 2007, asked respondents about 2006, thus the data represents the financial position of households before the onset of the financial crisis or "great recession" [18].

The dependent variable for this analysis is whether or not anyone in the household has taken out a payday loan in the prior 12 months. Only a small percentage of households report

[18] Though most questions were asked about 2006, the survey was in the field from roughly early May 2007 until late March 2008. This represents the beginning of the financial crisis, though many of the questions used in this analysis are moored in specific periods (e.g. 2006), and should not be affected by this.

payday borrowing – n=75 (2.4% of the full non-truncated sample; 3.6% of the truncated sample). The text of the question is:

> "During the past year, have you (or anyone in your family living here) borrowed money that was supposed to be repaid in full out of your next paycheck? IF YES: Please do not include personal loans from family members or friends"[19]

The key explanatory variables for this study are measures of financial support. There are two, the first a measure of perceived financial support, the second a measure of the provision of financial support. The question for perceived support reads:

> "In an emergency could you or your (husband/wife/partner) get financial assistance of $3,000 or more from any friends or relatives who do not live with you?"

The measure for whether or not the household has provided financial support is:

> "During 2006, did you (or anyone in your family living here), provide any (other) financial support for relatives or friends who do not live here?"

I include a number of controls within the limits of the data. Rather than control for different racial groups, and thin the small sample of payday borrowers, I use a dummy variable for black (all others—whites, Latinos, and Asians - is the reference group). I also control for education, age, marital status using a dummy variable for single (with married or otherwise cohabitating being the reference group), a dummy variable for the presence of children under 18 in the household (no children being the reference group), and total household income.

I also use a host of household financial variables. The first set examines available resources and assets. The households self-assessed financial position is measured with a dummy variable indicating if the household reported spending more than it earned in 2006 (not overspending is the reference group). The household's debt burden is included by looking at the

[19] This is a simple yes/no question. The amount borrowed, or number of loans taken out, is not asked.

Financial Obligation Ratio (FOR), or its total debt and rent payments divided by total household income. The FOR measure is a slightly expanded version of the Federal Reserve's financial obligation ratio[20]. I sum the households annualized reported credit payments on all outstanding loans (mortgages, vehicle, educational, etc.), property taxes, rent, and vehicle lease payments, then divide by total household income[21]. Asset measures include a dummy variable for whether or not the household owns its current residence (owners are the comparison group), and the households available financial resources in the form of liquid assets – the sum of checking and saving balances[22]. Liquid assets are measured in thousands of dollars and logged.

I next introduce two credit controls. First is the household's total available credit in its revolving, non-store specific credit cards, measured in thousands of dollars and logged. The second is a dummy variable for whether or not the household has been declined credit for any reason in the last five years (those not declined are the reference group). Finally, I include two measures of household "shocks": a dummy variable for if anyone in the household was unemployed during 2006 and a separate dummy variable for having experienced any form of income variation in 2006.

Note that I do not include measures of a wider assortment of less liquid household asset holdings such as bonds, stocks, or mutual funds. This is because payday lending households own virtually no assets outside of their homes, which is already accounted for in the model. I add variable sets sequentially, testing to see mediating effects[23].

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[20] For more information about the FOR, see: http://www.federalreserve.gov/releases/housedebt/about.htm.

[21] This includes all mortgage payments, vehicle and educational loans, and other lines of credit. In computing revolving credit, I follow the Federal Reserve and take 2.5% of credit card balances as the monthly payment amount (approximately minimum payments) and multiplied by 12 for annual amounts.

[22] I do not include money market funds or CDs in this calculation.

[23] There are difficulties associated with directly comparing coefficients across models (Allison 1999). I choose to simply focus on the direction and significance of the variables, which is legitimate in some cases (Mood 2010).

Rather than looking at all households, I limit the analysis to households earning less than $80,000 in yearly income[24], which equates to a low and moderate income households. The cut off was determined by looking at the highest income reported by a payday borrowing household in the sample, and then using this as the upper bound. Sub-setting the sample in this way decreases the overall sample size from 4,418 to 2,390 households.

Method

Because the dependent variable is dichotomous, I use a series of logistic regressions to test the effects of the explanatory variables. However, the number of payday borrowers in the SCF is small—75 borrowers, 3.2 percent of the truncated sample. As a result the models are sensitive to specification. Because of this, I keep the models very simple and avoid thinning respondents by using interaction terms[25].

Analysts using the SCF must also find a way to handle multiple imputation, a method of generating values for missing data and for disclosure limitation[26]. In this instance, five "implicates" or versions of the data were created, the combination of which provides the best estimate of missing data. In order to get valid regression estimates, it is necessary to run the analysis on each implicate, and then combine these results. In order to handle this, I use the

[24] Note that rerunning the analysis excluding those who earn more than $50,000 per year, a typical top limit for low and moderate income groups, does not substantially alter the pattern of results. Running the model on the full sample changes the significance of the income and age variables, but the overall pattern of results remain essentially unchanged. Allowing total household income to range up to $80,000 may be best thought of as including low, moderate and middle income households as defined by the Community Reinvestment Act.

[25] I did rerun this analysis using Gary King's Rare Events Logistic Regression, which is designed to handle situations where there are very few "successes" on the dependent variable – less than 5% of total cases (Tomz, King and Zee 2003). In the general sample of the 2007 SCF, only about 2.4% of households payday borrow, and within the truncated data this increases to about 3.2%. Regardless, the results are virtually identical using either analytical approach.

[26] For additional information about the use of imputation in the SCF see Kennickell 1998. Disclosure limitation refers to efforts to minimize the chances that respondents can be identified through information provided in the SCF.

"mim" package within STATA written by Galati, Royston, and Carlin (2007) (see also Royston, Carlin, and White 2009). Note that there are no widely agree upon measures of fit for models estimated using multiple imputation. As such, I use the testparm function to test if the addition of each series of variables is significantly different from 0.

Results

Descriptive Analysis

Table 1 displays demographic and financial information of those with and without perceived support and those providing or not providing financial support. Blacks are substantially less likely to perceive support, as are single households. Financially, households with support appear to be more stable, with higher incomes, lower debt payments to income ratios, and larger savings and available credit, however households without support are not on average destitute. But households without support also have less 'healthy' financial practices, as they are more likely to overspend and less likely to have been denied credit in the last five years.

Households providing financial support appear quite similar to non-providing households, though black households are more likely to provide financial support than are non-blacks.

Financially, supporting households have slightly greater incomes and savings, but less available credit. It does not appear that households not providing financial support cannot do so for financial reasons, or that, supporting households show signs of financial distress.

Table 2 compares the financial position of payday borrowing and non-borrowing households. Clearly, on a household income basis, payday households are not substantially less well off than non-borrowing households, and nearly a majority have a credit card. But where

they differ is with respect to resources – they have only a little over a thousand dollars in savings, about 13 percent of what non-borrowers hold. They are less likely to own their home, and average less than $700 in available credit. Payday borrowing households are also twice as likely to have overspent in the last year, and three times as likely have been denied credit in the last five years. This is consistent with payday loans as a alternative credit source among those with limited resources and little to no access to mainstream credit markets (Elliehausen 2009). Also notable are the differences in perceived financial support and providing financial support. While over 60 percent of non-borrowing households perceive support, only 35 percent of borrowing households perceive support. Conversely, borrowing households are almost twice as likely to provide financial support, 13.6 percent versus 22.4 percent.

Figure 1 graphically illustrates rates of payday borrowing among different network groups. Overall, 3.2 percent of households earning less than $80,000 have taken out a payday loan. Consistent with the argument presented here, perceived financial support does affect rates of payday borrowing—over 5 percent (5.3%) of those without perceived support have taken out a payday loan, an increase of 60 percent over the overall rate of borrowing. Less than 2 percent (1.8%) of households with perceived financial support took out a payday loan. Providing financial support has a similar effect—over 5 percent (5.2%) of providers have taken out a payday loan.

These network differences persist if we only look at those facing resource limitations. Figure 2 shows payday borrowing across resource constraints—those with less than $500 in liquid assets or less than $500 in available credit, and those with BOTH less than $500 in liquid assets and $500 in available credit. Those with greater than $500 in savings and available credit ("No constraints") clearly borrow at much lower rates than those with either credit or savings

constraints or households with both constraints. Those with some form of constraint are from two to three times more likely to have taken out a payday loan.

Figures 3 and 4 display separate estimates for those with and without perceived support from friends and family, and those providing and not providing financial support, respectively. Those who perceive support are clearly less likely to payday borrow, with the gap widening as resource constraints become more severe. A similar pattern is found in Figure 4—those providing network support payday borrow at greater rates, with the differences growing across constraints. As expected, rates of payday borrowing increase dramatically among those facing resource constraints. But network relations have effects over and above resource constraints—perceived support is related to lower rates of borrowing, while providing support is associated with higher rates.

Multivariate Analysis

Table 3 presents the results of the logistic regression using all implicates. Results are presented in logits (log odds), where the effects of each variable are additive. Standard errors are included in parentheses. Positive logits indicate an increase in the odds of taking out a payday loan, while negative odds indicate a decrease. The first model is the baseline model that focuses on the effects of demographic characteristics and household composition. Subsequent models introduce additional variable sets: Networks, Budget (payment and assets), Credit, and Shocks.

Among demographic characteristics, the age coefficient is positive, and age squared negative, though age is only significant in the first model. Single households have higher log odds of taking out a payday loan, a roughly 65 percent increase in the odds over married or

otherwise cohabitating couples[27]. This effect remains relatively consistent across all models. The child in the household variable is never significant[28]. Note also that the black coefficient is never significant but is positively related to borrowing.

I next introduce the primary explanatory variables—perceived access to financial support and the provision of financial support to family or friends outside the household. Both coefficients are consistent with expectations—perceived access to financial support decreases the log odds of taking out a payday loan by .838, or an Odds Ratio of .432. This is a reduction in the odds of roughly 47 percent. At the same time, households providing financial support have odds of taking out a payday loan significant greater than those not providing support – an increase in the log odds of .864, or an odds ratio of 2.37. In other words, the odds of a household providing support taking out a payday loan are 137 percent higher than for non-supporting households, all else equal.

Model 3 introduces measures of household assets and payments. Households that own, rather than rent, have lower significantly lower odds of borrowing. In addition, liquid assets, the sum of the households checking and savings balances, does lower the odds of payday borrowing as one would expect. Interestingly, the effects of the asset measures are insignificant after the introduction of the credit variables. Contrary to expectations, the household's Financial Obligation Ratio is negative and significant - as a household's payment on its financial obligation rises as a share of its income, the odds of borrowing *decrease* rather than increase, an effect that holds even after the introduction of the credit and shock variables. I use the FOR as a possible indicator of budgetary constraint—a household with a high percentage of its income

[27] 65% comes from the following formula for computing percentage change in the odds: (OR-1)*100.
[28] I also originally included a household size variable. This was never significant and did not alter the results.

dedicated to maintaining its debt holdings will have little additional money to deal with unexpected financial problems.

Because the FOR includes outside of debt obligations (e.g. leases, insurance, taxes), I also used another measure, the Debt Service Ratio, which focuses more narrowly on debt payments. In bivariate models, both the DSR and FOR are significantly and positively associated with overspending, though not with making payments more than two months late. Nevertheless, the DSR, as with the FOR, is significant and negative in models of payday borrowing. The FOR might be a measure of past credit capacity. Indeed, a households FOR is positively associated with absolute levels of total debt[29]. The negative coefficient thus may be a result of past borrowing, as debt payments would primarily affect liquid reserves, which are already controlled for in the model. Thus the FOR may primarily measure accumulated debt.

Households that report overspending in the last year are significantly more likely to take out a payday loan—an increase of nearly 200 percent in the odds of borrowing, all else equal. This is similar to the ARC (2009) findings, which showed that respondents who reported difficulty in managing day to day financial matters were nearly twice as likely to take out a payday loan. This effect remains even after the introduction of the credit constraint variables.

The credit variables—the amount of available credit, and the categorical variable on whether the household had been turned down for credit in the last five years, are introduced in model 4. Payday lenders are seen as alternative lenders, thus an implicit assumption is that many borrowers have little credit and are shut out of main stream credit markets. The results are consistent with this perspective. Having credit available substantively decreases the odds of a

[29] There is some evidence of underreporting of credit card debt (Zinman 2009). Assuming it occurs randomly, this should only affect the magnitude of the coefficient, not the direction. But if low income households are more likely to underreport, this could bias the results (Karlan and Zinman 2008).

household taking out a payday loan. The importance of credit is reinforced by the effect of being credit constrained—a household that has been turned down for credit in the last five years has odds of taking out a payday loan, 164 percent higher than non-credit constrained households[30]. These results illustrate the strong role that credit constraints play in payday borrowing and is consistent with payday loans as "emergency loans", useful when other credit options aren't available.

Payday borrowers frequently cite financial emergencies as a reason for borrowing. Income shocks are also commonly associated with other forms of financial distress, such as payment defaults (Getter 2003). Thus I introduce variables associated with income "shocks"—experiencing income variation and having a period of unemployment in Model 5. Each increases the odds of taking out a payday loan, as expected, but neither is close to significance. Asset, budgeting and credit factors appear more important in payday borrowing than shocks[31]. This is consistent with Agarwal, Skiba, and Tobacman (2009), who found that the liquid reserves of payday borrowers did not have a sudden rapid drop typically associated with unexpected emergencies. Instead they saw a steady decline over months, which suggest more chronic financial difficulties.

Why might providing financial support lead to payday borrowing? The obvious mechanism is that financial support acts as an additional strain on households budgets. However, households providing support appear to have the resources to assist, with both higher incomes and greater liquid assets than those who are not providing support. Still, the median size of financial transfer was roughly $2500, 6.4 percent of the household's total income—a sizable

[30] I originally included a dummy variable for those who have ever declared bankruptcy as an alternative credit constraint measure. The bankruptcy variable was not significant, nor did it alter any of the findings.
[31] In addition to unemployment and income variation, I also originally used a dummy variable for poor health, which was not significant.

amount (see Table 4). I estimated models adding size of support, in both dollars and as a percentage of total household income, but the variable was never significant, nor did it alter the overall findings.

Another possibility is that households may over-extend themselves when giving to particular recipients—the extension of financial support may emerge from the operation of network dynamics that differ depending upon who is receiving support. For example, norms of financial assistance may differ for support to children versus assistance to friends. The 2007 SCF tracks support given to a wide variety of recipients. Table 4 presents data on transfer to various recipients—children over 18, parents, siblings, friends, and others[32]. The bulk of all transfer go to close kin—children, parents, siblings and friends—accounting for over four fifths of all transfers. While the median financial transfer is $2500, amounts given to each group vary considerably. The median amount provided to children ($4000) is nearly twice that given to other recipients, while friends receive only about a quarter of this amount ($1100). There are also differences in payday borrowing across households providing to each category of recipients.

About 5 percent of households providing support (5.2%) take out payday loans, but this mask considerable variability across who is supported. Households giving to parents or siblings borrow at lower rates than both households giving to grown children (5.1%), to others (6.0%) and friends (9.5%). Note again that the amount given, whether in dollars or as a percentage of household income, is not a good predictor of borrowing. There may be differing norms of support among different sets of networks, where financial overextension may be more or less appropriate. Another alternative is that some households simply have different "marginal

[32] Includes grandparents, grandchildren, nieces and nephews.

propensity to support", with those giving to friends or more distant family members having a higher marginal propensity, which may be correlated with other (unhealthy) financial behaviors.

Discussion

This paper adds to the growing literature on the role of network support in household maintenance. In particular, it builds on work showing both the costs and benefits of networks by directly tying the provision of support to costly forms of emergency credit – payday borrowing. While the beneficial aspects of perceptions of network support are in the expected direction, they are not significant after controls. The provision of support, however, significantly increases the odds of payday borrowing. Similar to research showing the downside of other forms of network relations, such as social capital (Portes and Sensenbrenner 1993) and embeddedness (Uzzi 1997), this research illustrates the potential negative consequences of involvement in networks of financial support.

Previous work on the downsides of financial support in networks has relied on the presence of needy parents or siblings (Heflin and Patillo-McCoy 2002). I focus instead on whether or not support was provided. The regression results demonstrate that budget factors are paramount in payday borrowing, particularly overspending, the lack of available credit and being credit constrained. This suggests that households helping other network members financially may face additional budgetary pressures, but there is little evidence that the size of support is the determining factor, when measured either in absolute terms or as a proportion of total yearly household income. Payday borrowers were *more* likely than non-borrowers to have supported someone outside the household, though on average the size of support was smaller. In addition, borrowing shows substantial variation over who is supported. Even here, amount of support

seems unrelated to payday borrowing, as those supporting friends borrow at the highest rates, but report the lowest median amount provided. Given the limited financial means of borrowing households, the frequency of providing support runs counter to other findings showing financial transfers typically go from more successful households to less successful, liquidity constrained households (Cox 1990; Fingerman, Miller, Birditt, and Zarit 2007; McGarry and Shoeni 1995). In the absence of data on recipients,

Network resources may be appropriate for some exigencies and not others. In a separate analysis, I examined another costly outcome—payment defaults, or being behind by more than two months on any outstanding debt, using an identical model. The same network logic that applies to payday borrowing should also apply here, with perceived support helping households avoid late payments, and the provision of support possibly exacerbating a household's financial position. Financial support relations played no significant role, though defaults were driven by similar factors—particularly overspending and credit constraints. This is a reminder that not all outcomes "mean" the same, in a qualitative sense, and thus the "appropriateness" of relying on networks for assistance will vary across the different types of problems. It may be that certain types of financial emergencies are handled through networks, while for other types of financial problems households turn to payday loans, for example housing payments (Wu and Eamon 2010). Payday loans may allow households to avoid future obligations to network members or help the household avoid signaling to others in the network that it represents a risky future loan recipient because of money management problems. Moving forward, researchers should investigate how households use and maintain their networks, and how this interacts with more detailed financial decision-making. Money issues are also intensely private, with financial problems sometimes bringing character judgments. Relying on payday loans allows households

to keep these issues private. More generally, the way that households conceptualize money, debt, and obligation may be bundled in meaningful, predictable ways (Zelizer 1996; Zelizer 2005).

Though payday borrowing households are not poor or destitute on an income basis, they have financial resources far below one would expect, often times as little as ten percent of the liquid assets and available credit of non-borrowing households earning less than $80,000. The frequency of perceived support, which tracks income closely, is also much lower among payday borrowers. Of those households earning incomes on par with payday borrowers, 57 percent report perceiving support, versus only 35 percent for borrowers. Networks can be central for wage and savings strategies (Edin and Lein 1997), and in the case of households that payday borrow, they may have already overburdened these networks. Still, the overall pattern of perceived support is consistent with the finding that those with greater resources are more likely to report access to support (Harknett 2011), though *how* resources matter, and what *kinds* of resources, warrants additional investigation.

Note that I have not controlled for an important dimension of social support—the particular structure of ties that constitute an individual's place within a network, also known as structural support (Thoits 1995). However, the SCF does ask households if their parents are alive, the number of adult children living outside the household, and the total number of siblings. In a separate analysis, I looked at how these may affect perceptions of support and the provision of support. None of the family variables are correlated in bivariate analyses to providing support. The number of parents alive is positively associated with perceived support, while there is a negative relationship between total number of siblings and provision of support.

Limitations

The greatest limitation is simply the structure of the SCF—as a cross-sectional dataset. Ideally, it would be possible to see how changes in financial support impact borrowing across time, or at minimum ensure that perceptions of support and the provision of support predate the outcomes of interest. As it stands, it is difficult to determine whether or not households that are in need of payday loans, and all that it entails, are also simply more likely to provide to others. In other words, the effects may emerge not from network dynamics, but from an orientation to money that is also similarly predicted by network and payday models.

There are two different issues with the measures used for financial support. One is the use of perceived support. This is common in the literature on social support generally, as perceived support has been correlated with positive outcomes and less conflated with need then receiving support (Harknett 2006; Harknett and Hartnett 2011; Thoit 1995). Nevertheless, the mechanism through which perceived support produces effects is not entirely clear. I assume it measures the availability of resources in a households network, and that households have indeed received funds from the network (the SCF does not ask this question). This is not the only possible mechanism. For instance, previous use of financial support may lead households to act more responsibly in anticipation of future contributions to the network, and thus they would have greater resources buffering them from future shocks and thereby mitigating the need for payday borrowing. But perceptions of support might be conflated with a whole set of issues that are not measured in the SCF, including excessive borrowing from networks, and a variety of psychological and personality factors.

The question used for perceived financial support also asks about relatively large amounts ($3,000), much larger than amounts typically seen in studies of financial transfers (Henly et al. 2002; Schoeni 2002). By having the amount so large, we have probably understated

perceived access to financial support, and thus biased the perceived support effect downwards. Still, $3,000 is an amount consistent with other measures of financial fragility (Lusardi, Schneider, and Tufano 2011).

I also keep the network variables separate rather than using them as a scale, primarily because they are essentially uncorrelated: 0.03. I do not interpret this as problematic for either measure, but rather it illustrates the complexity of network relations. Households are typically involved in providing support along various dimensions – they may provide both financial and in-kind support, and more symbolic forms of help. While in many circumstances there are strong norms of reciprocity (Dominguez and Watkins 2003), support provided may not be of the same "type". Households are commonly involved in forms of "generalized" exchange—cash is not always returned with cash, but different forms of support are reciprocated in various ways (Sarkisian and Gertel 2004). Indeed, the extent of fungibility of the various dimensions of support is in need of greater exploration.

Conclusion

Payday borrowing is typically used as emergency borrowing, when households encounter financial disruptions for which they do not have adequate reserves. Networks can play a dual role in this dynamic—they may help households "get by", or they may in fact be a drain on a household's financial position. Perceived financial support, in line with expectations, does decrease the odds of taking out a payday loan, but the effect is not significant after the introduction of controls. The provision of financial resources increases the odds of payday borrowing even after controlling for demographic, household, budget, and credit factors. The primary economic factors in household budgeting and credit operate as one would expect, with

overspending, the lack of available credit and the inability to get additional credit all significantly associated with increases in the odds of taking out a payday loan. Payday borrowing does not seem associated with income shocks, such as unemployment, thus it may be long term financial difficulties and mismanagement that suddenly become acute.

It remains unclear whether long-term use of payday loans has detrimental consequences on the financial well-being of households. Households becoming trapped in "cycles of debt" would certainly be an indicator of poor credit terms and desperate borrowers, but the evidence for "cycles" is as of yet inconclusive (Morgan, Strain, and Seblani 2008; Skiba and Tobacman 2010; Stoianovici and Maloney 2008; Melzer 2011). However, one implication of this study is that if payday loans were to become less accessible, and as a result households were forced to rely more heavily on their networks for financial support, this would have consequences beyond these credit constrained households. By extension, large scale reductions in government financial assistance to poorer households, as is currently being debated, may also impact the financial standing of the networks supporting aid recipients (Chiteji and Hamilton 2005).

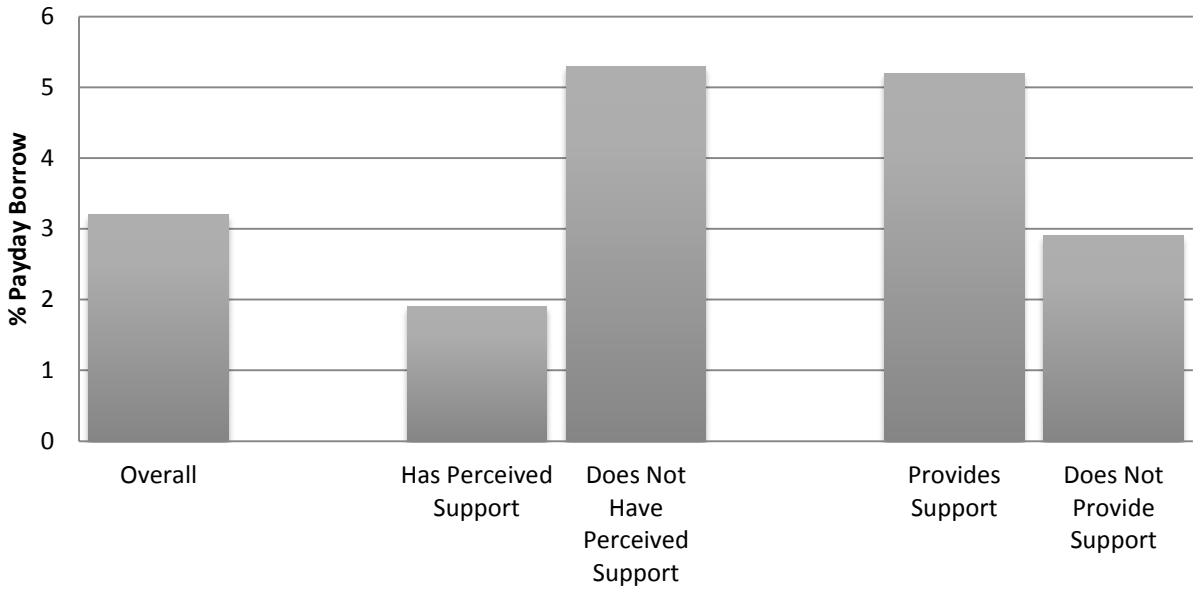
Still, decisions about borrowing do not occur within a vacuum. While the democratization of credit has been beneficial for some households, it has also been associated with increased instability and risk taking (Dynan 2009). Coupled with long term exclusion from financial institutions, increasingly invasive credit rating technologies, and the wide spread use of fees as a source of profit in the banking industry, it is imperative to understand the changing nature of credit decisions. In this way, current debates regarding the wisdom of payday loan availability and regulation misses the forest for the trees. While payday regulations may ensure that consumers are protected from truly predatory practices, it does little to address the underlying problems that many low and moderate income households face—stagnating wages

and difficult job prospects. Moreover, our current banking system appears oriented towards the needs of high paying customers while extracting as much as possible from low balance accounts through fees and fines. It is debatable whether our current first-tier financial system can even offer "healthier" versions of payday loans (Fellowes and Mabanta 2008; Stango 2012; Stegman 2007).

If households are willing to provide money to the point where their financial position is at risk, even if only in the short run, it may force us to re-evaluate the norms of support in networks. Motivations for exchange have largely been restricted to a mix of altruistic or exchange oriented transfers (Bianchi, Hotz, McGarry and Seltzer 2008), and the findings presented here suggest some support for altruism. However, network support is embedded in complex relations of consideration, reciprocity, and obligation, whose inner workings remain unexplained. While we know, for instance, that money can be the basis for power relations and a domain for expressing values within relationships (Singh 1997), we know less about the dynamic between social support and the monetary relations of network members. Caregiving generally is rife with what Zelizer (2005) has called "relational work", thus we should see similar efforts within networks of financial support.

Future research should identify the criteria network members use to judge the cost and usefulness of financial support. The time horizon over which these judgments are made may help provide additional analytical leverage on the willingness of households to put their own financial position in jeopardy. Finally, understanding the types of "monies", transactions and relations enacted in support may help us better situate social safety nets in households strategies in making ends meet.

Figure 1: Payday Borrowing Across Network Groups, among those earning less than $80,000 in Household Income



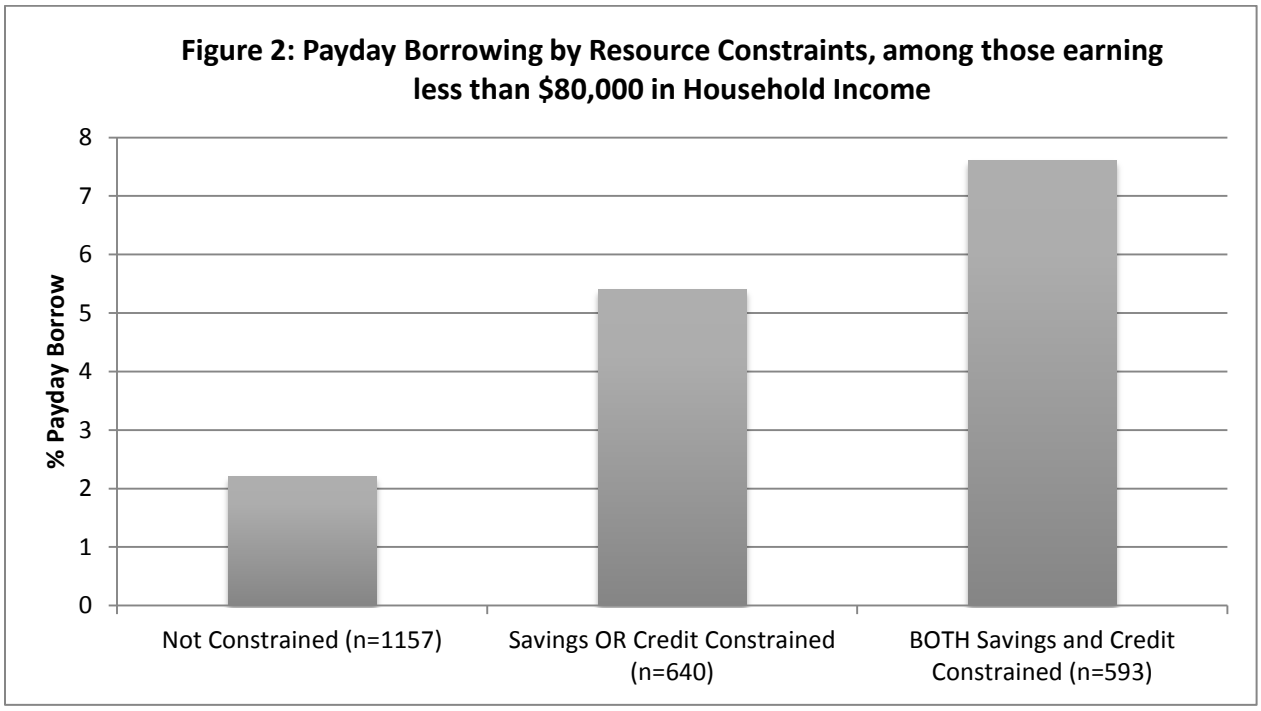


Figure 2: Payday Borrowing by Resource Constraints, among those earning less than $80,000 in Household Income
% Payday Borrow
8
7
6
5
4
3
2
1
0
Not Constrained (n=1157)
Savings OR Credit Constrained (n=640)
BOTH Savings and Credit Constrained (n=593)

Figure 3: Mean Payday Borrowing Across Resource Constraints, by Perceived Support, among those earning less than $80,000 in Household Income

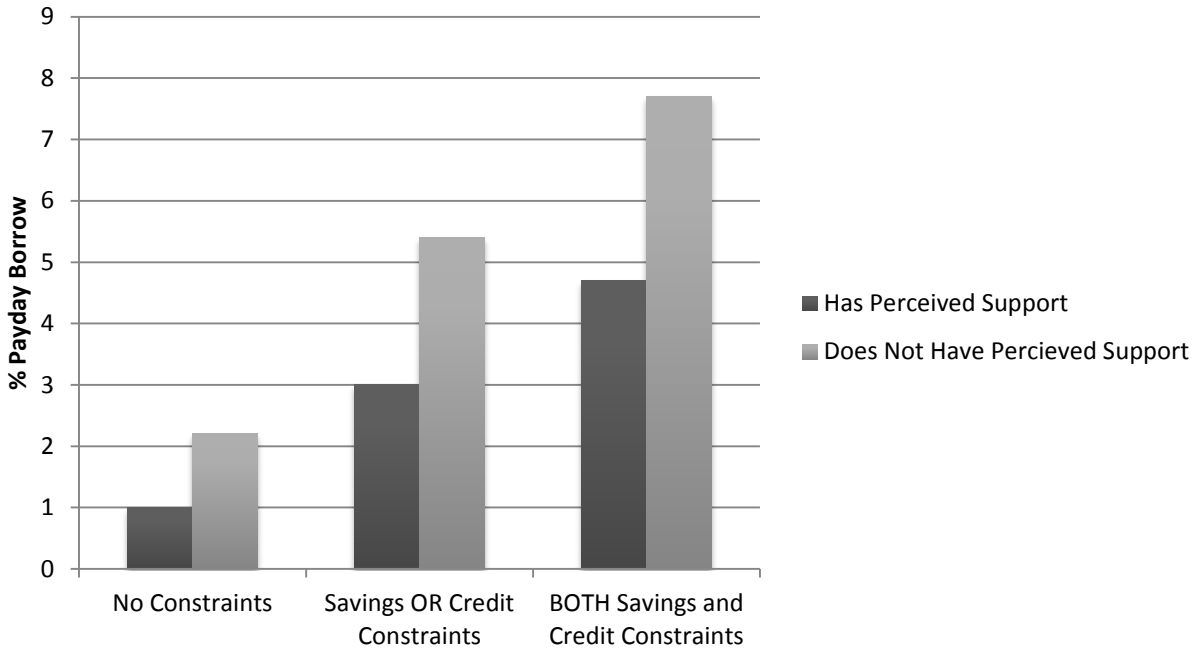


Figure 4: Mean Payday Borrowing across Resource Constraints, by Providing Support, among those earning less than $80,000 in Household Income

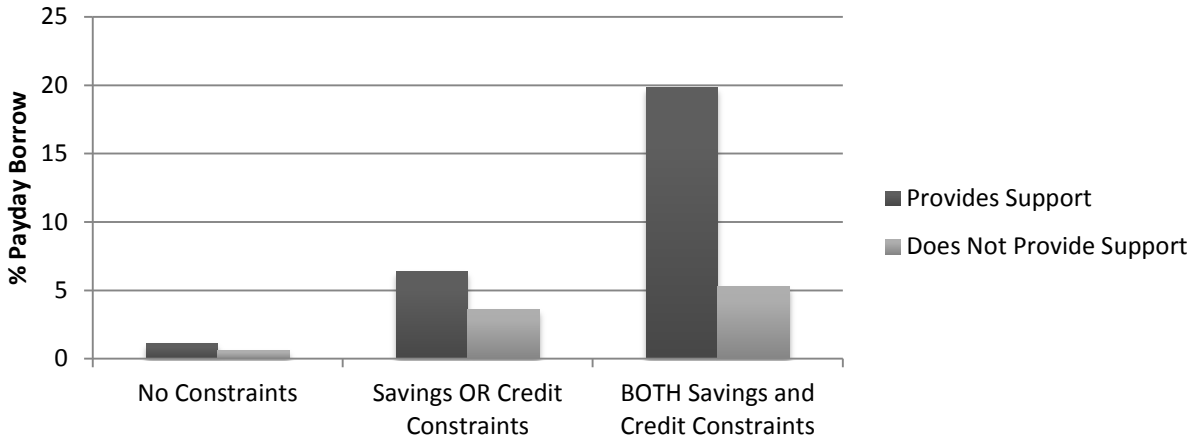


Table 1: Demographic And Financial Differences Of Those With And Without Perceived Support, And Those Who Have And Have Not Provided Support, among those earning less than $80,000 in Household Income

	Perceived Financial Support		Provide financial support	
	Yes (n=1455)	No (n=935)	Yes (n=342)	No (n=2048)
% Black	11.1% (.008)	20.3% (.013)	16.3% (.021)	14.5% (.008)
Age	51.1 (.536)	49.4 (.603)	50.9 (.934)	50.3 (.430)
Years of Education	13.2 (.069)	11.9 (.098)	12.9 (.158)	12.6 (.061)
% Single (never married, separated, divorced)	48.3% (.01)	55.8% (.02)	48.1% (.03)	51.8% (.01)
% with Children	23.4% (.01)	28.9% (.02)	22.6% (.02)	26.2% (.01)
Total HH Income, Mean	39,025 (566.7)	29,794 (645.5)	41,474 (1158)	34,405 (461.6)
% Own	60.2% (1.30)	42.7% (1.66)	56.5% (.027)	52.8% (.011)
Liquid Assets, Mean	11,425 (942.7)	5,271 (719)	12,575 (1887)	8,425 (679.6)
% with Credit Card	71.5% (.012)	47.0% (.016)	69.4% (.026)	60.7% (.010)
Available Credit	13,409 (619)	5,773 (451)	14,844 (435)	9,683 (1496)
FOR, Mean	33.9 (1.07)	37.1 (1.55)	35.1 (2.64)	35.2% (.927)
% that Overspend	17.7% (.010)	26.2% (.014)	22.3% (.023)	20.8% (.009)
Denied Credit	16.6% (.010)	22.9% (.014)	19.1% (.024)	19.0% (.009)
Unemployed last 12 months	10.7% (.962)	17.4% (.012)	15.5% (.02)	13.0% (.01)

Note: All summary statistics calculated using weights. Additional information about sample weights used in the SCF can be found in Kennickell and Woodburn 1997.

Table 2: Demographic and Financial Differences between Borrowers and Non-Borrowers for those earning less than $80,000 in Total Household Income

	Non-Borrowers (n=2315)	**Borrowers (n=75)**
% Black	14.4 (.01)	22.4 (.05)
Age	50.7 (.39)	39.0 (1.4)
Years of Education	12.7 (.06)	12.4 (.31)
% college degree	25.3 (.01)	19.5 (.05)
% Single (never married, separated, divorced)	50.9 (.02)	60.3 (.13)
% with Children	28.6 (.01)	45.2 (.06)
Total HH Income, Mean	35514 (445)	31673 (2024)
% Own Home	54.2 (.01)	27.2 (.05)
Liquid Assets, Mean	9260 (672)	1187 (276)
% with Credit Card	62.5 (.01)	44.1 (.05)
Available credit, mean (for those with cards)	10727 (422)	655 (200)
FOR, Mean	35.2 (.9)	33.8 (2.5)
Overspend	20.2 (.01)	45.9 (.06)
% Denied credit in last 5 years	17.8 (.01)	56.4 (.06)
Experienced HH unemployment last 12 months	17 (.01)	34 (.06)
Experienced Income variation 2006	22.9 (.01)	39.1 (.06)
% perceive network support	61.5 (.01)	35.3 (.06)
% provide network support	13.6 (.01)	22.4 (.05)

Note: All summary statistics calculated using weights

Table 3: Financial Support and Payday borrowing among those earning less than $80,000 in Total Household Income
Logistic Regression using MIM, Log Odds and Standard Errors in parentheses (n=2390)

	Model 1	Model 2	Model 3	Model 4	Model 5
Controls					
Black (all others ref group)	.164	.047	.036	.038	.045
	(.297)	(.300)	(.304)	(.306)	(.304)
Education (years)	-.065	-.036	-.030	-.029	-.029
	(.045)	(.047)	(.051)	(.054)	(.053)
Age (years)	.111**	.100*	.086	.094	.091
	(.055)	(.056)	(.058)	(.058)	(.058)
Age squared	-.002**	-.002**	-.001*	-.001*	-.001*
	(.001)	(.001)	(.001)	(.000)	(.000)
Single	.549**	.526*	.489*	.530*	.529*
	(.278)	(.278)	(.290)	(.292)	(.292)
Child in the HH	.306	.276	.220	.177	.181
	(.268)	(.270)	(.290)	(.281)	(.282)
Total HH Income, Thousands	-.010	-.001	-.0001	-.002	-.000
	(.007)	(.007)	(.009)	(.009)	(.009)
Financial Support					
Perceived Financial Support		-.838**	-.503*	-.403	-.434
		(.264)	(.275)	(.278)	(.281)
Provide Financial Support		.864**	.901**	.890**	.881**
		(.286)	(.295)	(.301)	(.301)
Assets and Payments					
Own Home			-.633*	-.484*	-.464
			(.334)	(.334)	(.334)
Liquid Assets (thousands, logged)			-.174**	-.068	-.071
			(.067)	(.076)	(.076)
Financial Obligation Ratio			-.009*	-.009*	-.009*
			(.005)	(.005)	(.005)
Overspend			1.07***	.921***	.904***
			(.256)	(.261)	(.264)
Credit					
Available Credit (thousands, logged)				-.318**	-.311**
				(.114)	(.114)
Denied Credit, last 5 yrs.				1.05***	1.03***
				(.270)	(.270)
Shocks					
Household Unemployment					.059
					(.297)

Income Variance				.315 (.260)
F-test results	P(f)=0.0001	P(f)=0.0000	P(f)=.0000	P(f)=0.4262

*-significant at the .10 level, ** - significant at the .05 level, *** - significant at the .001 level

The constant is omitted from each model. F test results are for joint tests, though each variable grouping was tested and is significant at least at the .10 level, excluding the Shock variables (household unemployment and income variance).

Table 4: Recipients of Support* and Median Amounts Provided and Rates of Payday Borrowing among those earning less than $80,000 in Total Household Income

	Percent of all Support Received	Median $ Amount Provided	Percent of Total HH Income**	Percent Payday Borrow
Overall		2500	6.4	5.2
Grown Children	36.2	4000	9.8	5.1
Parents	22.5	2000	5.3	3.9
Siblings	15.2	2250	5.9	3.3
Friends	12.3	1100	3.3	9.5
Others	13.7	2500	7.5	6.0

*Note that all recipients of support live outside the household and respondents are instructed not to include either spousal or child support.
**This is the median percent of total household income provided as support

Chapter 5

Change Across Time

In this chapter, we take advantage of the 2009 survey of consumer finances re-interview of 2007 respondents to revisit some of these questions. I try to answer several related questions:

1. Did the onset of the financial crisis increase the amount of payday borrowing? Payday loans are "emergency loans", and thus we would expect the use of payday borrowing to increase during an economic downturn.
2. Did payday borrowing before the crisis lead to a greater likelihood of borrowing in 2008, controlling for any changes in financial position? Proponents of regulating, or eliminating payday loans often talk of a "debt spiral," or a situation in which a substantial percentage of households that use these loans often take out more than one loan. Thus households who have taken out a payday loan before should be more likely to take out a payday loan at a later point. In addition, in natural experiments after the outlawing of payday borrowing, there is some dispute as to whether access to payday loans increases the chances of bankruptcy, so we also look at whether households who took out a payday loan in 2007 were more likely to report filing for bankruptcy, net of changes in financial position.
3. Were households who had access to financial support from friends and family in 2007 less likely to take out a payday loan in 2009, after controls for changes in financial position? In the Chapter 3, my models suggested that while perceptions of financial support were associated with lower odds of taking out a payday loan, the effect was not significant. I retest the relationship using the re-interview data.

4. Finally, were households that provided financial support in 2007 more likely to take out a payday loan? We saw in Chapter 3 that households that overspent were more likely to provide financial support. Then in Chapter 4 we saw that those providing financial support were more likely to take out a payday loan. It was unclear, however, whether it was the financial support itself that acted as the source of financial problems leading to payday borrowing. Here, we look at how inter vivos transfers in 2007 are associated with the odds of taking out a payday loan in 2009, net of controls.

The re-interview data collection undertaken by NORC and the Federal Reserve will go a long way in helping us understand the nature of the relationships we find in the data. One need only think back to the requirements for probabilistic causation, in particular the importance of time ordering. The ability to see how activity at time 1 is associated with a change in a set of variables at time 2 provides some evidence of a causal relationship. In addition, having data on the same households at two points in time allows us to control for other possible sources of error. In particular, we are better able to control for omitted variables. In fixed-effects models, time-invariant unmeasured variables that are be correlated with your outcome of interest go away as a possible source of bias in your estimates. Unfortunately, measured time-invariant variables also fall away. Because we are interested in some of the measured time-invariant variables, we will use a random-effects model instead. More details about the difference between fixed and random-effects will be dealt with in my discussion of methods and analytical approach.

Networks

In Chapter 4, I argued that providing financial inter vivos transfers acts as an additional financial pressure on household budgets. There was evidence of this in the logistic regression

models, which showed that providing financial support was associated with greater odds of payday borrowing, net of controls. This is consistent with both the descriptive analysis in Chapter 2, which shows that households that provide financial transfers are also more likely to overspend, as well as the models in Chapter 3 predicting network support, which showed a significant relationship with overspending Because the analysis in Chapter 4 was cross-sectional data, we could not conclude persuasively if the effect between giving and borrowing was causal, but the re-interview data should allow us greater purchase on this issue. Thus, we will proceed with the same hypothesis: that financial support to friends and family is often given even among the economically insecure; accordingly it acts as an additional financial pressure and can lead to a need for emergency high cost credit. We should see a positive relationship between giving and payday borrowing.

We also discussed the role of the "private safety net"—if a household perceived access to financial support from friends and family (Bentolila and Ichino 2008; Harknett 2006; Kotlikoff and Spivak 1981). From our descriptive analysis, it was unclear whether or not this question captured the presence of a support network, or if it simply captured whether or not the support threshold ($3000) was a reasonable sum for a household's financial network. Perceptions of network support seemed to track income and savings levels. But in our cross-sectional models in Chapter 4, which included a host of controls for the households' financial position, we did see an effect in the appropriate direction. Households who perceived support were less likely to take out a payday loan, but the effect was not significant. We can now retest this in the re-interview data, with the same hypothesis that households that perceive financial support should be less likely to take out a payday loan.

Long Term Effects of Payday Borrowing

Researchers and policy makers concerned about payday borrowing have focused on two issues. The first is whether payday borrowing is associated with additional or repeat borrowing. This is fairly well established, as most studies found patterns of subsequent borrowing (CFPB 2013). Basic descriptive analysis across a number of studies bears this out. King et al (2006) found that 90 percent of loans went to households that had previously taken out at least five loans in the last year. Sixty percent went to households that had taken out more than 12 loans. An FDIC study in 2005 found that half of the payday lenders in their study took out seven or more loans in a year. A California Department of Corporations study (CDC 2008) used data taken from the state's lenders and found that 24 percent of their repeat customers had taken out at least 10 loans during the 18 month study period. Only 16 percent took out a single loan. Lawrence and Elliehausen (2008) found that in their sample of borrowers, 48 percent had taken out six or more loans in the previous year.

This pattern of borrowing is often referred to as a "debt-spiral," which can have serious consequences for households already facing financial insecurity. Skiba and Tobacman (2009) show that payday borrowing may push these households into bankruptcy. Comparing households that were barely approved for payday loans versus those that were declined because of credit checks, they show that being approved leads to additional payday borrowing over the subsequent 12 months. This is the equivalent of $1,600 in payday loans, including $300 in "interest" payments[33]. And while payday loans were a relatively small fraction of the total debt these households held at the time of their bankruptcy filings, the higher costs of payday loans meant that payments on the interest on these loans might have been quite large relative to their portion

[33] Note however that they mean fees, which is how borrowers are charged, not via an interest rate. The interest rates are extrapolated from the fees paid and the time the loan is typically held.

of the composition of debt. Ultimately, they show that households that were approved for payday loans were more likely to file for bankruptcy than were households that were declined the loans.

This points to the second issue associated with payday borrowing—are they actually improving the financial position of households? Aside from bankruptcies, there is also evidence that payday borrowing exacerbates, rather than alleviates the capacity of the household to pay its bills. Agarwal, Skiba and Tobacman (2009) find that taking out a payday loan is associated with a doubling of the chances of a two-month credit card payment delinquency in the next year[34]. Looking at access to payday loans, in lieu of data on borrowers themselves, Melzer (2011) shows that lower income households have greater difficulty paying their utility and medical bills, as well as rent and mortgages, in locations where payday loans are available.

There are some studies that indicate positive outcomes associated with payday loan access, though this tends to be at the aggregated data level looking at access rather than use. Morgan and Strain (2008) show that households in Georgia and North Carolina were affected by the ban on payday loans. Both states had relatively more bounced checks and greater rates of bankruptcy. In other words, here payday borrowing keeps households from more expensive outcomes, such as bouncing checks. They take this as evidence against the "payday trap" or "debt spiral" hypothesis. Similarly, banks in areas that have limited access to payday loans have a greater share of their income made up of insufficient funds fees, which are arguably more expensive than payday loans, and report more returned checks (Morgan, Strain, and Seblani 2012). Looking at individual data when Oregon instituted a rate cap for its payday loans,

[34] In addition, they find that households that payday borrow have not always fully exhausted their available credit, and as a result, have substantial dollar losses to the larger interest rates of payday loans versus credit cards. They present this as similar to the credit card paradox of households having liquid reserves large enough to pay off interest incurring credit card debt, yet not doing so. This is a similar problem, where less expensive credit alternatives may be available. This does not appear to be the case here, and available credit is a significant predictor of increased odds of payday borrowing.

Zinman (2008) also found evidence of a substitution effect—switching from payday loans to even more expensive forms of credit. Households without payday borrowing increased their use of bank overdrafts and were more likely to have bounced a check.

While I cannot address all the issues here, the SCF 2007 – 2009 panel does allow me to try to answer some important questions. Chief among these is whether or not payday borrowing is associated with payday borrowing in the future. Based on this literature, my hypothesis is that there should be a strong positive correlation for payday borrowing. I also can look at whether or not payday borrowing is positively associated with filing for bankruptcy (of any type). Here again, the hypothesis is that there will be a positive relationship between payday borrowing and bankruptcy.

Data

The SCF is a triennially collected survey of American households that uses a two-stage sampling design with both standard multi-stage area probability sampling as well as a list sample, based on information provided by the IRS (Kennickell 2005). The multi-stage sampling design is representative of the US population with respect to a number of characteristics. The response rate for this portion of the sample was 68 percent (Kennickell 2008). The unit of analysis in the SCF is the principle economic unit, but for all intents and purposes this maps onto a household of economically interdependent occupants. Demographic information refers to the respondent—the economically dominant or more knowledgeable adult member of the household. The head of the household is defined as the adult male household member. Complete demographic data is not available for every household member.

In 2009, NORC under the direction of the Federal Reserve, undertook a re-interview of their 2007 respondents from the Survey of Consumer Finances. The principle motivation for this was to evaluate the effect of the financial crisis, and subsequent economic downturn, on American households. The 2007 survey was in the field primarily in 2006, while the 2009 survey was primarily done in 2009. Of the 4,418 original respondents to the 2007 Survey of Consumer Finances, 3,862 were re-contacted and re-interviewed, indicating a relatively low level of attrition across the two time periods. Five of these households were dropped for disclosure reasons, leaving the final sample size of 3,857.

The re-interviews included nearly identical formulations of questions from the previous survey (2007). While more detailed questions were dropped, these were generally replaced by a single question that covered similar terrain (e.g. asking about total savings balances rather than the number of savings accounts and the balance of each individual account). Where necessary, I have added missing 2007 variables into the 2009 re-interview data, but some caution should be used in their interpretation—merged 2007 data was imputed using a different process than what was used in the 2009 data, and the 2007 data contained in the panel data was re-imputed.

Dependent Variable

The main dependent variable for this analysis is whether the household took out a payday loan. While many questions in the 2007 and 2009 are exactly the same, there is a slight difference in the questions—in 2009, the wording was updated to make sure that respondents knew they were being asked about a payday loan.

The 2007 question is:

> "During the past year, have you (or anyone in your family living here) borrowed money that was supposed to be repaid in full out of your next paycheck? IF YES: Please do not include personal loans from family members or friends."

The 2009 question is:

> "During the past year, have you (or anyone in your family living here) taken out a "payday loan," that is, borrowed money that was supposed to be repaid in full out of your next paycheck? IF YES: Please do not include personal loans from family members or friends."

The main explanatory variables for this paper look at the role of the household's network relationships. I look at whether the household perceives access to financial support from friends and family, and whether or not the household is providing financial support to a friend or family member outside the household. The questions are the same across both years of the survey:

Perceive Network Support variable wording:

> "In an emergency could you or your (husband/wife/partner) get financial assistance of $3,000 or more from any friends or relatives who do not live with you?
>
> In an emergency could you get financial assistance of $3,000 or more from any friends or relatives who do not live with you?"

Providing Financial Support (inter vivos transfers) variable wording:

> "During 2008 [in 2007: 2006], did you (or anyone in your family living here) provide any (other) financial support for relatives or friends who do not live here? Please do not include alimony or child support. INCLUDE SUBSTANTIAL GIFTS."

One difference between the two years of surveys is that in the 2009 re-interview, respondents are not asked about the specific recipients of their transfer, as they are in 2007. Basic descriptive statistics are provided for all of these variables in Table 1, including changes across the two years of the survey.

I also include four other sets of variables as controls and to investigate other hypotheses. The first are three basic demographic variables that include whether or not there is a child in the home (no child is the reference group), whether the household head has a college degree (no college degree is the reference group), and whether the household head self-identifies as black (all others—white, Latino, and others—is the reference group). College degree is often thought of as a proxy for financial literacy, which has been found to be moderately negatively related to borrowing. I expect that it will work here similarly. I include the black dummy variable because out of all racial/ethnic groups, they show the highest rates of borrowing (e.g. CDC 2008; PEW 2012). Because blacks have a long history of being discriminated against in credit and financial markets, they typically exhibit lower levels of trust in financial institutions (FDIC 2009). In addition, we also know that payday lending institutions tend to locate geographically in working class black communities (Pager and Shepard 2009; Temkin and Sawyer 2004). It is not, however, clear that blacks will continue to be more likely to payday borrow after controlling for financial position and behaviors. My tentative hypothesis would be that blacks will not be more likely than all other households to borrow after controls.

The second set of variables deal with the household's financial position—total wages, total savings (the sum of all checking and savings accounts), the amount of available credit (credit limits minus the outstanding balances across all credit cards), and net worth (a composite measure of the households total assets minus all outstanding debts). Because wages, savings, and available credit are highly skewed, I used a log transformation on them. However, because of the large number of households with negative net worth, the log transformation drops too many cases. This is one possible source of bias in the coefficients.

The third set of variables looks at the financial pressures the household may be facing. The first is the ratio of the household's financial commitment as a percentage of their annual income. While I call this the household's debt service ratio (DSR), it actually better approximates the Federal Reserve's financial obligation ratio (FOR) (Dynan, Johnson, and Pence 2003). While the DSR limits itself to credit card, mortgage, and rent payments, the FOR is more expansive and includes a wider range of debt payments. The FOR measure is calculated in the aggregate (using aggregate, not household data) by the Federal Reserve to approximate changes in debt holding and disposable income, though researchers have used it to measure the financial well-being of households. The credit constrained variable measures if the household has been turned down for credit, or if the household head did not apply for credit for fear of being turned down. The 2007 version of the variable asks about the previous five years, while the 2009 version asked about the two years between the first interview and the re-interview. In addition, I look at whether the household has experienced any period of unemployment, including both the household head, or if partnered, the partner's employment status. Because the loss of income from unemployment can put additional strain on household budgets, this should increase the odds of borrowing. This is coded as a dummy variable with the reference group being no unemployment.

Methods and Analysis

I begin with an extended discussion of the descriptive results and changes across the years. The descriptive results show the means for payday borrowers across both years of the data. Also presented are the changes in the variables across time.

For the multivariate analysis, I use a random-effects model to take advantage of the time-series dimension of the data. Random-effects models are often described as a combination of "fixed"-effects models and "between"-effects models. A fixed-effects model does not analyze the across-unit differences and uses only the inter-unit changes across time (e.g. changes within a single household's savings from 2007 to 2009). By looking at the household across two points in time, a fixed-effects model would have the advantage of controlling for any time-invariant unmeasured variables that have been left out of the analysis, thus decreasing the possibility of omitted variable bias. Because fixed-effects models look *only* at the changes that happen within units (in this case, units being households), when there is no change, no analysis can be done. This is why measured time-invariant variables, such as race or gender, cannot be included in the models, nor can instances where the outcome variable does not change across time periods. This is problematic because payday borrowing is a rare event, and thus losing cases should be avoided at all costs. The between-model method does the opposite, ignoring the inter-unit changes and instead looking at the cross-unit changes (similar to what you would find in regression methods of cross-section data). In other words, it does not look at changes within households, but instead only differences between households. Here, measured time-invariant variables can be used. The random-effects model takes a weighted average of these approaches, which has the benefit of taking advantage of the time-series and cross-sectional aspects of the data (including using measured time-invariant variables and more efficient estimators). In addition, random-effects are more legitimately generalizable than are fixed-effects, and they typically have smaller standard errors and greater statistical power (Allison 2005; Bollen and Brand; Hsiao 2003; Wooldridge 2002; Frees 2004)[35].

[35] Another possibility is a difference in difference approach, which might be appropriate for this analysis where we

One major assumption that must be met is that the effects of the parameters in the model have to contain roughly similar effects in both the time-series and cross-section. To see if this is true, I use a Hausmen test. A high score on this test suggests a greater difference between effects of the two approaches. When the two approaches are significantly different, the fixed-effect model is the preferred method for computing estimates[36]. I ran a Hausman test on a limited version of the model, as the full model contains time-invariant predictors. This produces a very small chi square that is significant. This provides weak evidence of a preference for the fixed-effects model, but given our other limitations (small sample size, interest in time invariant predictors such as race), I use the random-effects model.

Also, note that in the previous chapters, I focused the analysis only on low and middle income households—those earning less than $80,000 a year in total income. The $80,000 limit was chosen primarily because this was the upper bound of the income range for payday borrowers. In the analysis for Chapter 4, truncating the data in this way was relatively unproblematic, only because the relationship between income and payday borrowing appeared approximately linear, and thus truncating the data only marginally influenced the estimates. And indeed, running the models on the full dataset did not substantially alter the pattern of results. But in 2009, the range of incomes taking out payday loans increased past $100,000. I contribute this to the financial crisis, which in all likelihood made a larger proportion of households susceptible to financial problems. This pattern of results is generally consistent with other surveys. Older surveys, taken before the crisis, such as Elliehausen and Lawrence (200x) generally have a lower maximum income, sometimes as low as $50,000. But more recent

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would specifically want to make sure we account for changes across time, which can be estimated by incorporating differences for units that did not payday borrow. This approach suffers from the same flaws as the fixed-effects model, but in addition with only two data points the results approximate fixed-effects.

36 I include details on the Hausman test in the technical appendix to this chapter.

surveys have ranges running past $100,000, similar to what I find here (e.g. CFPB 2013; PEW 2012). In Webster's (2011) analysis of Advance America lending, he found that the median borrower had an income of roughly $54,000, above the median individual income for the US. In Chapter 4, because I had truncated the data, I used whether the household owned its own home as a proxy for assets. But because I'm including a wider range of households, I drop the own home variable and instead use the net worth variable directly.

Finally, payday borrowing is a particularly rare event. There are several major consequences of the lack of adequate sample size on the "success" of the dependent variable. Aside from possible bias in the coefficients, it severely limits the models available. A general rule is that there should be between five to ten successes on the dependent variable per variable in the model (Allison 2005; Vittinghoff and McCulloch 2006). With roughly 100 borrowers in 2007, this limits the model to between ten and 20 estimators. As a consequence, dummy variables were used selectively and interactions were avoided to ensure that small samples in cells would not produce unreliable estimates of effects.

Descriptive Results

After panel attrition, there are 3,857 households remaining in the sample. In 2007, the weighted percentage of households that took out a payday loan was 2.6 percent. In 2009, 4.1 percent of households took out a payday loan, an increase of over 60 percent. Overall, across both years, 5.9 percent of households took out a payday loan. Given that the economy was bottoming out in 2008 (the year the survey was in the field), we can assume that the increase is an indicator of two things: 1) payday loans are in fact emergency credit; and 2) households were feeling the effects of the downturn.

The growth in payday borrowing, however, is not constant across groups. Black and white households show the largest increases, 115 percent and 55 percent respectively. Latinos actually decline slightly, while those classified as "Other" by the Survey of Consumer Finances increased only modestly: 35 percent. This may indicate that blacks and whites were among the first to feel the downturn, though there is also some evidence that Latinos may have had access to reverse remittances that may have kept the demand for payday loans down.

It is possible to also look at the percentage of households that borrowed in 2007, 2009, and in both. This is displayed in Table 2. Of the 3,857 households in both 2007 and 2009, 94 percent never took out a payday loan. About 1.8 percent of households took out a loan only in 2007, while 3.4 percent took out a payday loan in 2009. Less than 1 percent took out a loan in both years. The makeup of payday borrowers is quite similar in 2007 and 2009 with similar age and education, though households who borrowed only in 2009 were about half as likely to have a college degree.

It is possible to look at the financial position of these households in 2007 and 2009 and see the change across time[37]. Below I provide averages for each year, as well as the average change. Given the onset of the financial crisis and the beginnings of the economic downturn, we should expect to see some change. For instance, among those who never took out a payday loan, average income decreased by about 3000 dollars, and roughly 47 percent of households saw a decrease in the annual wages. Households that borrowed only in 2007 saw an increase from $32,000 to $41,000, with only 29 percent experiencing a decline in wages. Households that borrowed only in 2009 had incomes nearly identical to what they earned in 2007, though still 40

[37] Note that it is typical to take the average of the variable being analyzed across all time periods and then to look at the difference of each time period from that average. But in this case, given the large disturbance that was the great recession, I feel it is more appropriate to look at the absolute size of the change from time 1 to time 2.

percent saw some sort of decline. And households that borrowed in both years, again a small fraction of all households, saw their income increase across both years. This suggests a couple of things. First, that households that payday borrow, when looked at beyond the borrowing, don't seem to pay a price in terms of their earnings. Indeed, households that borrowed at both times showed no drastic decrease in their earnings. Thus, this suggests, as Chapter 4 on financial pressures illustrated, that income is not the major determinant in payday borrowing.

The descriptive data on savings (what we have also called "liquid assets" —the combined total of the household's current checking and savings account), highlight some important aspects of payday borrowing. First, notice that in comparison to non-payday borrowing households, all payday borrowing households average fairly low savings balances. In fact, the median savings for all borrowers is $0. Households that had borrowed in 2007 had not accumulated additional savings by 2009, despite not borrowing in the previous year. Households that borrowed in 2009, but not in 2007, did have slightly higher savings in that time period, but by 2009 this had been depleted to levels of 2007 borrowers. And households that borrowed in both periods have nearly no savings in both time periods. One interpretation is that households that payday borrow appear to have chronic problems accumulating financial reserves, and payday lending may be a consequence, rather than a cause, of those behaviors. That said, prior to households borrowing, they appear to have higher levels of savings, but after borrowing, liquid reserves don't appear to recover.

One reason that savings may not recover is that households might choose to pay down credit, what's called deleveraging, rather than building up savings. Households that did not payday borrow saw only a small decrease in their available credit from 2007 to 2009. Borrowers in 2007 had, by 2009, built up nearly double their available credit, while 2009 borrowers

remained quite similar. Households that borrowed in both years saw little movement in their average available credit. While these averages would appear to suggest that households should not need to payday borrow because they have sufficient space on their credit cards, it is worth noting that the median level of available credit for all payday borrowing groups is $0.

Table 3 shows two sets of variables. The first deals with measures of financial struggles—whether the household was able to obtain credit, or whether the household overspent. The second deals with the household's network relationship. More specifically, it deals with whether the household perceived support, or whether it provided financial support to someone outside the household across both years.

One major factor in payday borrowing is credit constraints, or the inability to get additional credit. While sometimes levels of available credit are a proxy for this, a more commonly used measure is whether the household is able to get additional credit. Among non-borrowing households, the percent of credit constrained households remains nearly unchanged—19.5 percent to 18.3 percent, for 2007 and 2009 respectively. Households that borrowed in 2007 show very high rates of credit constraint that decline in 2009. A majority of borrowers in 2009 were credit constrained even in 2007, but the rate of credit constraint did not increase substantially by 2009 when they took out a payday loan. And households that borrowed in both 2007 and 2009, like those who borrowed only in 2007, did see a decrease. Some of this may be accounted for by the difference in the credit constraint measure in 2007 versus 2009.

One clear effect that downturns historically have had is to decrease wealth. This is precisely what we see here, even among payday borrowers who have little overall wealth to begin with. Among non-borrowers, you see a substantial reduction in wealth, on the order of about 20 percent. But households that payday borrowed in 2007, who have very low levels of net

worth (less than $20,000) saw their wealth hold steady. Those households that did not take out a payday loan in 2007, but did take out a loan in 2009, saw a very large reduction—almost 75 percent of the value of their wealth disappeared. Households that borrowed in both time periods also saw a large decrease. Again, similar to what we saw with savings, payday borrowers do not appear to accumulate resources, or see their assets appreciate substantially, even if they did not borrow in 2009. And again we see that in 2007, households that borrowed in 2009 had substantial resources, but by the time they had taken out a payday loan, these resources were mostly used up. Again, this group saw the largest decline in net worth. Finally, households that borrowed in both 2007 and 2009 begin with low levels of net worth, and by 2009 have substantially lost much of that value.

Financial Struggles

We have looked at the three different measures of financial struggles—overspending, the inability to get additional credit (being credit constrained), and the amount of annual income that goes towards servicing the household's debt. Credit constraints have been identified as an important reason why households would turn to payday loans rather than to other forms of debt. Interestingly, despite the economic crisis, the proportion of households that were credit constrained remained nearly unchanged at around 20 percent for both time periods. Those who borrowed in 2007 appear to have seen a marked increase in their credit access, as there was a 20 percentage point decline in the proportion reporting an inability to get credit. Households that borrowed in 2009 did not see a noticeable change in credit constraint, but a majority had been turned down for credit, much higher than non-payday borrowers. Finally, those that borrowed at both time periods also reported a decrease in credit constraints.

Rates of overspending are somewhat confusing. Households that borrowed in 2007 only clearly improved their budgeting, as the rate of overspending in this group matched that of those who have not taken out a payday loan. This may explain why they did NOT borrow again in 2009. Households that borrowed in 2009 only saw a slight increase in overspending, but only marginally so (4 percentage points). And those who borrowed both in 2007 and 2009 also reduced their overspending. This story is also consistent with the deleveraging/increased savings story, and this might explain why households were less likely to report overspending. Indeed, when asked about the most important financial issues that they face, payday borrowers talk about the importance of cutting back on spending, which may in turn increase their savings, and by extension, reduce rates of payday borrowing.

Finally, payday borrowing may arise from the lack of disposable income, a by-product of spending too much to service the debt they've already accumulated. So I look at the debt service ratio for each household across both time periods. Again, consistent with the increased savings/deleveraging story, even payday borrowers managed to lower the amount of their salary going towards paying off debt. As Bricker et al (2011) note, the reductions in overall net worth mostly came from decreases in the value of assets, rather than increases in debt levels. And, again, some of this may be counteracted by households that increased their savings as they decreased debt. In addition, because of the collapse in both business and personal credit markets during the 2007 – 2009 period, households that *increased* their debt service may in fact be the more credit worthy, and thus less vulnerable, households.

Networks

In terms of perceived financial support, there was little interhousehold change in rates of financial support. Only those households that borrowed in both time periods saw a marked reduction in perceived financial support. This is consistent with one interpretation of the data, which would suggest that those who are consistently in need of support, and frequently forced to borrow from friends and family, may exhaust the availability of assistance. This might explain why households that are financially struggling are less likely to report perceiving support, as well as the decline in support for those borrowing across both time periods. Though the small number of respondents that borrow across in both 2007 and 2009 (n=28) means that we should interpret the trend in this category with caution.

I have argued that providing financial support is tantamount to an additional source of financial pressure. We saw in Chapter 2 that households that overspent were more likely to provide support, which was confirmed in multivariate models in Chapter 3. Interestingly, the rate of providing support was fairly consistent across both time periods, with nearly 11 percent providing support in 2007, 2009, or in both 2007 and 2009, despite the onset of the financial crisis. This is weak additional support for the idea that providing financial support is more than simply helping, and is undertaken even under times of financial duress or downturn.

Multivariate Analysis

Table 4 presents the results of the random-effects model. The tables show logits and odds ratios, as well as the standard errors. Overall, the model is significant, as a wald test for the coefficients being simultaneously different from 0 is significant (wald chi sq with 12 df,

p=.000)[38]. The STATA xtlogit command also provides rho, or the correlation between the variances of the two time periods. This is often interpreted as the "usefulness" of the panel design. When this is small, and not significant, pooled models more likely fit the data better than do panel models, which are used here. The rho for this model is 0.358, which is significant, indicating that the panel design is better for this analysis.

I included three demographic variables to attempt to look at important questions in the literature. First is whether, after controls, blacks are more likely to payday borrow. Second, education is one of the few proxy measures found in the financial management literature to indicate greater financial knowledge and literacy. Finally, children are often a source of financial stress for a household, so I included a dummy variable for whether the household has at least one child. All three of the demographic controls are significant, though having a college degree is only barely so. Still, having a college degree reduces the odds of taking out a payday loan, controlling for other factors, by roughly 23 percent. In the time-series data, the difference between black households and all other households is significant, as black households have about 50 percent greater odds of payday borrowing versus all other households. Having a child in the household also increases the odds of borrowing.

The household's financial position is clearly an important determinant of borrowing. We see now that, though the wage coefficient is in the negative direction, indicating that it reduces the odds of payday borrowing, the effect is not significant. Instead, "stock" (versus "flow") resources are what decrease the odds of borrowing. All the financial variables are in the direction predicted.

38 For much of the fit statistics and diagnostics, I did not use the full imputed data, but rather the isolated implicate number three. Where possible, I did substitute the average value over all imputations rather than using the single imputed value found in the implicate. For instance, in diagnostics, I used mean wage over the implicates rather than the listed wage for that implicate.

I hypothesized that the household's debt service would have a positive impact on the odds of borrowing, as increased payments on debt should reduce the amount of available funds for savings. But in this model the debt service ratio has a negative impact on payday borrowing – higher debt servicing leads to lower odds of borrowing, all else equal. This is somewhat odd, but again, given the tightening in the credit markets, households with higher debt service ratios might represent financially healthier households.

Though debt payments are negatively related to borrowing, the inability to get credit, being "credit constrained" has a large and significant impact on the odds of payday borrowing – being unable to attain credit elsewhere significantly increases the odds of payday borrowing. Unemployment, as one would expect, increases the odds of taking out a loan, but this effect is small and not significant.

In Chapters 3 and 4, I argued that perceived support is an indicator of the availability of a private safety net, confirmation that the households have a network they can turn to for financial assistance during periods of financial shortfalls. In the cross-section models, these effects were present, but not significant. I hypothesized that these effects would be significant in the time-series models, and indeed, this is the case—perceptions of support reduce the odds of borrowing by nearly 40 percent. Network relationships are not unidirectional, and thus households might also be called upon to provide financial assistance to friends or family. I also hypothesized that this may act as another financial strain upon the household, and indeed, that hypothesis is confirmed. Providing financial assistance (of whatever size, and to whatever recipient) increases the odds of payday borrowing by roughly 50 percent.

Finally, I hypothesized that payday borrowing in time 1 would significantly increase the odds of borrowing in time 2. This is difficult to estimate in the random effects model, but the

post-estimation STATA command xtrho provides some additional details. These are presented in Table 5. The marginal probability of payday borrowing, with all variables at their margins, is 0.007. The joint probability of a household borrowing at both time 1 as well as time 2, a rare occurrence we saw in our descriptive statistics, is 0.0002. However, the odds ratio associated with payday borrowing in time 1 on payday borrowing in time 2, is very large: 5.26. This appears to confirm my hypothesis that payday borrowing leads to greater odds of payday borrowing at a later date, net of controls.

Discussion

My goal was to re-evaluate, and expand, on several claims that were explored in the cross-sectional analysis found in Chapter 4. We have been investigating the role of financial resources and financial pressures in payday borrowing. Much like chapter 4, we see that its savings, and the ability to get additional credit, that is significant predictors of borrowing, net of other controls. But the household's network relationships are also involved in this process. More specifically, I have examined the role of a household's relationships with its financial networks. I hypothesized that, consistent with other researchers (Harknett 2006, 2009), perceptions of financial support would be associated with a significant decrease in the odds of borrowing, net of controls. Perceptions of support have been found to be a good proxy for previously receiving support and are less likely to be confounded with other variables, such as the need for support and the financial situation that might have necessitated the support (Harknett 2006).

I also hypothesized that households that provide financial support would be significantly more likely to need to take out a payday loan, net of controls. Typically, inter vivos transfers (transfers to family while still living) are thought to flow from non-liquidity constrained

households to liquidity constrained households—people with more money helping people who have temporary cash shortfalls. While the analysis in Chapter 3 did suggest that income and financial resources were important predictors of transfers, there have been few studies of how these transfers may impact the financial position of households. A number of studies have made the argument for the "negative" aspects of network relationships (Portes 1998), but very few studies have shown how families are negatively affected by these attempts at helping. O'Brien (2012) and Chiteji and Hamilton (2005) do find that the tendency for black households to help family members may account for a substantial amount of the wealth difference with white households. In other words, network relations decrease asset mobility by siphoning off financial reserves to needy households. While my data cannot speak to that issue, I do find evidence that providing financial support increases the odds of payday borrowing, even after controlling for the household's financial position. Given that nearly half of all payday borrowers end up rolling over their loans several times, it is not unreasonable to identify the use of high cost credit as one possible mechanism through which asset mobility, even for households with relatively high wages, might be stymied.

Unfortunately, the small sample size of payday borrowers does not allow me to test interactions for differential effects of networks for black and non-black households. But the additional controls in the model, for debt holdings, credit constraints, and overspending, can plausibly said to capture some of the behaviors that make blacks distinct and over-represented in other, simpler analyses (e.g. Pew 2012).

Conclusion

The financial crisis and the "Great Recession" that followed saw an increase in unemployment, underemployment, and a substantial and rapid decrease in asset prices. Given the additional financial pressures, it is not surprising that payday borrowing increased, with more well-off families now faced with additional pressures. I have shown that the financial crisis appears to have significantly increased the incidence of payday lending. In addition, I show that network relations do significantly affect payday borrowing.

Table 1: Payday borrowing across 2007 and 2009, SCF Panel data, (n=3857)

Payday Borrowing	2007	2009
Took out a payday loan	2.6%	4.1%
Race		
Whites	2.0%	3.1%
Blacks	4.7	10.1
Latinos	4.8	4.6
Other	1.7	2.3

Table 2: Payday Borrowing in the 2007 - 2009 Survey of Consumer Finances Panel Data, Demographics and Financial Position, Weighted (n=3857)

	Did not Payday Borrow (n=3629)	**Payday Borrowed in 2007 (n=70)**	**Payday Borrowed in 2009 (n=130)**	**Payday Borrowed in both 2007 and 2009 (n=28)**
Overall	94.1%	1.8%	3.4%	.7%
Age	52	41	42	42
Education (yrs)	13.4	12.4	12.6	12.6
% College Degree	19%	11.6%	5.1%	12.1%
Singled 2007	39.7	65.1	41.7	52.5
Singled 2009	45.1	63.8	57.6	60.7
Income in 2007	85450	32260	42060	32700
Income in 2009	82420	41180	42355	36404
% Declining Income	47.1	28.6	40.2	42
Savings in 2007	14170	820	1160	61
Savings in 2009	17330	570	555	110
Avg. $ Change	3160	-250	-600	50
Available Credit 2007	22490	1400	5729	739
Available Credit 2009	21330	3270	5106	705
Avg. $ Change	-1160	1875	-620	-35
Net Worth 2007	368800	15250	47630	13210
Net Worth 2009	312875	16150	11045	1075
Avg $ Change	-55900	900	-36600	-12000

Demographic information (age, educ, and college degree given for 2009)

Table 3: Payday Borrowing in the 2007 - 2009 Survey of Consumer Finances Panel Data, Financial Struggles and Network Relations, Weighted (n=3857)

	Did not Payday Borrow (n=3629)	**Payday Borrowed in 2007 (n=70)**	**Payday Borrowed in 2009 (n=130)**	**Payday Borrowed in both 2007 and 2009 (n=28)**
Credit Constrained 2007	19.5%	72.0%	52.8%	72.8%
Credit Constrained 2009	18.3	53.6	57.6	47.0
Overspend in 2007	18.4	40.3	31.6	52.2
Overspend in 2009	17.8	19.0	35.4	12.8
Debt Service 2007	28	40	37	37
Debt Service 2009	21	28	29	40
% Increasing Service				
Networks				
Network Support 2007	68.7	32.5	43.7	38.8
Network Support 2009	65.5	28.5	41.3	19.3
Network Provide 2007	16.3	21.5	19.3	24.7
Network Provide 2009	16.9	15.4	20.2	8.5

Table 4: Random-effects Logistic Regression Results

	Logits	Odds Ratios	SE
Black HH	.414235***	1.51321269	0.0994146
Child in HH	.2940467***	1.341846566	0.0858145
College Degree	-.2609203*	0.770342313	0.150851
Total wage (logged)	-.0049065	0.995105517	0.0582973
Savings (logged)	-.0858045***	0.917773638	0.0130311
Net Worth	-1.73X10-06***	7.60219E-11	1.81E-07
Available Credit (logged)	-1.02***	0.36059494	0.010746
Debt Service	-.001	0.9990005	0.0009105
Credit Constrained	1.275515***	3.580544916	0.0857032
Unemployment	.0299095	1.030361282	0.0906134
Perceive Support	-.5835973***	0.557887863	0.1033826
Provide Support	.5249894***	1.69044093	0.0875529
rho	.358***		

* - significant at the .10 level
** - significant at the .05 level
*** - significant at the .001 level

Table 5: Results of the XTRHO post-estimation command, results all computed at the median of the independent variables

		Lower bound	Upper bound
Marginal Probability at the median	.007	.005	.008
Joint Probability of payday borrowing in both time periods	.0002	.0001	.0004
Odd's Ratio for previous borrower borrowing again	5.26	3.76	7.49

Conclusion

"Nicki Newman, who worked at two payday-lending stores during the past six years, most recently at Heartland Cash Advance in Chillicothe, Ohio, said if a customer didn't come back later for a new loan, the company would call them weekly. That ensured that the same 200 to 300 customers returned every two weeks to pay off their previous loan and take out a new one. Ms. Newman's former employer at Heartland, Larry Hauser, said he fired her for criticizing payday lending at work… 'I call my customers every week for the same reason a car-servicing company sends you a message when it's time to get your oil changed', Mr. Hauser said.

- Nicki Newman and her former employer Mr. Hauser, quoted by Easha Anand in the *Wall Street Journal*

"Christina McHan failed to repay a $200 loan from Cash Biz, near Houston. In November 2012 she was arrested, pleaded guilty, and was assessed $305 in additional fines and court costs. She spent a night in jail to "pay off" the debt…In all, the Bexar County DA has accepted more than 1400 criminal complaints from payday lenders since 2009, totaling almost $373,000…"

- Forrest Wilder, writing in the *Texas Observer* about jail for borrowers

"…you've got to get that customer in, work to turn him into a repetitive customer, long-term customer, because that's really where the profitability is"

- Dan Feehan, CEO of Cash America[39]

In this dissertation, I have tried to explore the interrelationship between economic insecurity, debt, and networks using the highest quality financial data currently available to researchers. Debt and networks represent two alternative means by which households try to deal with financial instability and budgetary shortfalls. I focused on payday borrowing among low and middle income (LMI) households – those reporting earnings less than $80,000 in 2006. Because payday borrowing is often used as expensive emergency credit, looking at these borrowers provides an excellent opportunity to look at the financial position and attitudes of the economically insecure, households that may be facing an acute monetary shortfall.

[39] Quoted in Green 2009, pg. 20

Chapter 1 reviewed the overall debate regarding payday loans. I discussed what payday loans are, how they are often used, and complaints about the industry. I also showed how the payday lending industry has mobilized to protect itself from regulation.

In chapter 2 we looked at financial position of payday borrowers. I show that payday , borrowing households do have slightly lower incomes but the biggest difference is the lack of financial reserves payday borrowing households have accumulated. While this may be because payday households had recently depleted their savings prior to the survey, they also reported wanting lower levels of emergency, or buffer shock, savings. Though they had fewer savings, a substantial proportion did have access to a credit card (44 percent), but credit limit and the amount of available credit was far less that other LMI households. They also had slightly higher payments on their debt, as a percentage of their income. And a much higher percentage of payday borrowing households were credit constrained.

Chapter 3 looked at the determinants of financial network participation among LMI households. We saw that many of the factors associated with payday borrowing households were associated with decreased odds of having access to financial support. At the same time, these same variables, in particular if the household overspends, is associated with greater odds of providing financial support to adult children.

Chapter 4 argued that providing financial support acts as an additional financial drain on household budgets. I showed that, controlling for financial position and financial struggles, households that provide financial support were more likely to use payday loans. We also saw that payday lending was provided by the absence of other alternatives: having available credit on credit cards did significantly reduce the odds of borrowing, while being credit constrained increased the odds of borrowing. One other possible alternative payday borrowing, perceived

access to financial support from friends and family, did reduce the odds of payday borrowing, but the effect was not significant.

Finally, in Chapter 5, I used recently released data to see how the same households from the 2007 SCF fared during the financial crisis. I compare the rates of payday borrowing across the two periods, showing that payday borrowing increased by rough 60 percent between 2007 and 2009 among the same households. I then used a random effects model to test a similar model from Chapter 4, looking at the effect of financial position, financial struggles, and networks. Again, income is not significantly associated with payday borrowing, instead, it is accumulated resources – net worth, savings, and available credit all decreased the odds of borrowing.

Alternatives to payday borrowing were also important – being credit constrained significantly increased the odds of borrowing, and perceiving access to financial support significant reduced the odds. And, as in chapter 4, perceived support once again acts as an additional financial burden, and significantly increases the odds of borrowing. We also saw that households who payday borrowed in 2007 were significantly more likely to borrow in 2009, with an associated odds ratio of 5.26, suggesting a 425 percent increase in the odds of borrowing, all else equal.

What should we take from this? First and foremost is that payday borrowing does appear to be the credit of last choice for households with few alternatives. Having access to credit, being able to get additional credit, and having access to financial support all help households avoid borrowing. And when households have sufficient reserves, either in the form of assets (net worth) or savings, they are less likely to borrow. Debt overhang, or the additional money needed to service previously acquired debt, does not appear to be a significant source of financial pressure on payday households.

Second, networks matter for the households financial options. Providing financial support is associated with greater odds of payday borrowing, both in the cross-section models in chapter 4 as well as the longitudinal random effects model in chapter 5. In the latter, perceived access to financial support also decreases the odds of borrowing. In the case of providing support, I have followed previous research in assuming that perceived support indicates previous use of financial support from friends and family (Harknett 2006). Much of the work on financial support and inter vivos transfers argues that money flows from households that are not liquidity constrained to households that are. I show that many households that provide financial support may themselves be stretching themselves thin to support others, which may impact their future financial well-being.

We do not currently know enough about how familial and financial relationships are managed and organized, and know quite a bit less about how they interrelate to impact the households short-term welfare or its long-term financial trajectory. This calls for additional qualitative study of organizations of kin network ties and familial support, similar to the type of research undertaken by Zelizer (2005) when she discusses relational work. This may allow us to better understand when network support facilitates important welfare boosting outcomes, such as asset mobility or entrepreneurship, and when, or if, network support acts an inflection point, leading otherwise healthy households towards payday loans, bill defaults, bankruptcy, or worse.

Overall, if households are willing to provide money to the point where their financial position is at risk, even if only in the short run, it may force us to re-evaluate the norms of support in networks. Motivations for exchange have largely been restricted to a mix of altruistic or exchange oriented transfers (Bianchi, Hotz, McGarry and Seltzer 2008), and the findings presented here suggest some support for altruism. However, network support is embedded in

complex relations of consideration, reciprocity, and obligation, whose inner workings remain unexplained. While we know, for instance, that money can be the basis for power relations and a domain for expressing values within relationships (Singh 1997), we know less about the dynamic between social support and the monetary relations of network members. Caregiving generally is rife with what Zelizer (2005) has called "relational work", thus we should see similar efforts within networks of financial support.

Future research should identify the criteria network members use to judge the cost and usefulness of financial support. The time horizon over which these judgments are made may help provide additional analytical leverage on the willingness of households to put their own financial position in jeopardy. Finally, understanding the types of "monies", transactions and relations enacted in support may help us better situate social safety nets in households strategies in making ends meet.

Regulations

In chapters 1 and 5, I laid out the basic outlines of the debate over regulating payday borrowing. One the one hand, consumer advocates have pointed to ample evidence of debt spirals for a large proportion of payday borrowers, leading to higher rates of defaults on bills and bankruptcies. On the other hand are researchers who argue that there is not sufficient evidence to conclude that debt spirals exist, or that they produce negative outcomes, such as bankruptcies. Further, the absence of payday credit makes financially struggling households worse off, as they are less likely to be able to meet their obligations and more likely to rely on more expensive credit options (e.g. bank overdrafting). Because the SCF 2007 and 2009 re-interview did not ask

respondent to report their frequency of borrowing, I cannot directly address these questions. However, I do find that 2007 payday borrowers were more likely to payday borrow again in 2009, net of controls.

The number of borrowers, the frequency of borrowing, and the total size of the industry, would seem to indicate that there is a unmet need for credit, particularly among those that no longer qualify for other forms of credit. But is allowing LMI households greater access to credit a good thing? It would appear that the democratization of credit has made households, even middle class households, less secure (Sullivan, Warren, and Westbrook 2000). Pressman and Scott (2009) have detailed the debt-poor, who earn near poverty wages but have debt loads of households with much higher incomes. They calculate that if you include the impact of servicing their debt on household incomes, it would increase poverty rates in the US by a full percentage point. We have not seen in these data that payday borrowing households are struggling under high debt loads, but this may be part of the long trajectory towards economic insecurity.

My own sense of the available data, however, is that the preponderance of evidence, from national surveys to propriety data made available to researchers (CFPB 2013), show that debt traps are real. Indeed, as the quotes at the beginning of this chapter reveal, payday lending institutions are also quite aware of the importance of repeat borrowers to their bottom lines. Thus, any conclusions regarding the overall welfare benefits for household to access to payday loans is much less clear cut. I do, however, interpret the data on debt rollovers as an indicator for the underlying demand for credit, and not that these households simply refuse to properly manage their budgets. A number of surveys have indicated that, aside from rolling over loans, borrowers frequently take out more than one loan at a time, from multiple lenders. This is clear evidence of a demand for credit greater than what most states allow payday lenders to provide.

It may be that the ability to access convenient, if costly, credit leads to *over-borrowing*, and the problem isn't payday borrowing per se, but rather payday borrowing at the margins. There is also evidence that the problem may have a cognitive dimension – individuals that grow up in scarcity may be prone to over-borrowing (Shah et al 2012). And financial behaviors tend to be quite entrenched, as indicated by the fate of many lottery winners. Hankins, Hoekstra, and Skiba (2010) looked at Florida state lottery winners who won between $50,000 and $150,000 and found that this positive income shock did not keep financially struggling households from filing for bankruptcy, but instead delayed their troubles.

Thus, one question that remains is how to intervene into financial practices in a way that can help households build "healthy" financial habits. Payday borrowers are typically aware of the terms of payday loans, and acknowledge how expensive they are, but clearly this does not keep them from needing or using them. In addition, many states (including California) have disclosure laws that require that payday loan fees be prominently displayed. Some researchers (Cole et al 2009) have found that increased math education can improve financial management, but most of the research on the role of information and disclosures suggest that they have a very small effect on behavior – whether it be health, financial or otherwise.

Two tiered financial system

In 2006 and 2007, on the cusp of the financial crisis and recession, banks began increasing many of their fees for low balance account holders, including fees for over-drafting and insufficient funds. Banks fees had been climbing over the period, up to 38 Billion by 2008, a 27 percent increase over 2005 (Bretton Woods 2010). This may have pushed households away

from “primary” financial institutions and towards “alternative” institutions like payday loans. But this probably only accelerated an ongoing process among low and moderate income households, who were not seeing any rapid increase in wages, were witness to increasing economic uncertainty as their main asset (housing) was being threatened by the declining values, and were increasingly either underemployed or unemployed (based on trends in the U6 measure, a measure of under and un-employment). What services did main-stream banks have for these households? A good proportion of these households did not have perfect credit histories, and credit requirements were increasing after 2007, not only for credit cards but for mortgages as well (notably, banks weren’t even willing to lend to other banks at this time). In other words, banks offered little to no services for a good proportion of US households that were facing difficult times without perfect credit histories to rely upon.

Evaluating the net welfare effect of eliminating payday loans is very complex task. Some of it may hinge on the extent to which the use of payday loans (whether paying them back on time, or defaulting), has an impact on an individual’s credit score. It seems increasingly likely that, similar to CoreLogic, at some point one of the major credit reporting agencies will begin to keep track of payday borrowing. If payday loans become a signifier of financial mismanagement to the big credit reporting agencies, regardless of whether you default or not, then in my estimation, given the pattern of rollovers most households encounter, the payday lending industry should face greater levels of regulation.

Conversely, one policy recommendation that I would make is that we should find ways to make payday loan a path way back to mainstream credit markets. Individuals who use payday loans successfully, don’t default, and keep rollovers to a minimum, should have a bump up in their credit scores. This would provide greater incentives to pay off loans in a timely manner,

while also increasing users confidence and feelings of efficacy so that, when they are able to get a credit card at reasonable interest rates, they are better able to manage it. Currently, several companies and non-profits have adopted this type of approach. Mission Asset Fund (http://missionassetfund.org/), based in San Francisco, helps undocumented students and emancipated foster youth form lending circles to facilitate filing immigration forms or paying a security deposit on housing. Aside from being an external guarantor of trust for what is commonly thought of as an informal financial practice, MAF reports payments into the lending circle as a debt payment to the credit agencies, and through this they are able to raise the FICO scores of participants. Lendup (https://www.lendup.com/) is a small dollar lender that allows borrowers to choose to pay back their loan in as little as seven days to as many as thirty. They also report repayment to the credit agencies to help borrowers increase their FICO scores. It remains to be seen whether either of these efforts, which are just two examples of several on-going innovative financial projects, are profitable, or can be scaled up for more participants. MAF, for instance, relies on funding from other non-profits and grant agencies.

While the democratization of credit has been beneficial for some households, it has also been associated with increased instability and risk taking (Dynan 2009). Coupled with long term exclusion from financial institutions, increasingly invasive credit rating technologies, and the wide spread use of fees as a source of profit in the banking industry, it is imperative to understand the changing nature of credit decisions. In this way, current debates regarding the wisdom of payday loan availability and regulation misses the forest for the trees. While payday regulations may ensure that consumers are protected from truly predatory practices, it does little to address the underlying problems that many low and moderate income households face – stagnating wages and difficult job prospects. Moreover, our current banking system appears

oriented towards the needs of high paying customers while extracting as much as possible from low balance accounts through fees and fines. It is debatable whether our current first-tier financial system can even offer "healthier" versions of payday loans (Fellowes and Mabanta 2008; Stango 2012; Stegman 2007).

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