REPORT REVIEWING RESEARCH ON PAYDAY, VEHICLE TITLE, AND HIGH-COST INSTALLMENT LOANS

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I. Summary of research on payday, vehicle title, and high-cost installment loans

(1) This report summarizes research regarding payday, vehicle title, and high-cost installment loans, with a particular focus on the predatory nature of such "fringe" financial services in targeting certain minority demographics. Hereinafter, this report refers to these three categories of loans as "covered loans."[1]

(2) Research on covered loans reveals the following overarching conclusions:

- Consumers of covered loans are disproportionately low income and disproportionately African American or Hispanic.
- Lenders of covered loans geographically target minority consumers and communities with high concentrations of African American, Hispanic, and low-income households. Several studies present evidence that lenders of covered loans also utilize marketing schemes to target minorities.
- Lenders of covered loans charge higher prices in minority neighborhoods, consistent with race-based price discrimination. A number of studies also document price discrimination against minorities in traditional banking and mortgage lending.
- Consumers of covered loans may not understand the terms of and the risks of prolonged indebtedness associated with taking out covered loans. Lenders of covered loans often do not comply with information disclosure laws and regulations. Borrowers of covered loans tend to have low financial literacy and be overly optimistic or impatient about their future income.
- Access to covered loans can have a negative impact on the readiness and performance of military personnel and consumers' financial well-being, ability to prioritize other liabilities and responsibilities, and overall health.

[1] In its 2017 Final Rule, the Consumer Financial Protection Bureau (CFPB) referred to payday, vehicle title, and certain high-cost installment loans as "covered loans." 12 CFR § 1041 (2017) [hereinafter "2017 Final Rule"] at 54512. In the finance literature, the term "covered" also refers to the fact that a debt obligation is backed by a pool of assets, e.g., covered bonds. *See, e.g.*, Barbara Petitt, Jerald Pinto, Wendy Pirie, and Bob Kopprasch, *Fixed Income Analysis*, 3rd ed. (Hoboken, NJ: John Wiley & Sons, 2015), 14. In this report, "covered loans" exclusively refer to payday, vehicle title, and certain high-cost installment loans.

II. What are covered loans and how are they used?

(3) The financial services industry has expanded beyond the traditional financial services offered by regulated financial institutions, such as banks and credit unions. A variety of nontraditional or "fringe" financial service providers have grown in popularity, providing alternative forms of financial services to consumers. The prevalence of fringe lending has led to considerable debate in both academic and regulatory circles. This report focuses on three types of fringe lending: payday loans, vehicle title loans, and high-cost installment loans, together referred to in this report as "covered loans."[2]

(4) Payday loans are small, high-cost loans that are typically structured as single-payment, i.e., closed-end, loans with due dates that coincide with a borrower's next payday. Because the due dates are scheduled in this manner, loan terms are typically two weeks. However, the specific loan terms can be shorter or longer, depending on the borrower's pay frequency.[3]

(5) When taking out a payday loan, borrowers often provide a post-dated personal check or an authorization to electronically debit their deposit account for the amount due, which is the sum of the loan amount and the associated fees. Although the check or authorization essentially serve as a form of security for the loan, borrowers generally return to the store when the loan is due to repay in person. If a borrower does not return to the store when the loan is due, the lender has the option of depositing the borrower's check or initiating an electronic withdrawal from the borrower's deposit account.[4] A variant on storefront payday loans that has gained traction in recent years is online payday loans. Online payday lenders often use the Automated Clearing House system to deposit the loan amounts directly into borrowers' checking accounts. To collect payments, lenders submit a payment request to the borrower's depository institution through the same system.[5] In both storefront and online payday lending, typically no credit check or underwriting is involved.[6]

(6) Vehicle title loans are a type of loan in which the consumer borrows against the value of his or her vehicle. The lender takes a security interest in the borrower's vehicle and determines the loan amount

[2] *Id.*

[3] Consumer Financial Protection Bureau, "Payday Loans and Deposit Advance Products: A White Paper of Initial Data Findings" (white paper, Consumer Financial Protection Bureau, Apr. 24, 2013), *available at* https://www.consumerfinance.gov/data-research/research-reports/white-paper-on-payday-loans-and-deposit-advance-products/.

[4] *Id.*

[5] Consumer Financial Protection Bureau, "Online Payday Loan Payments" (white paper, Consumer Financial Protection Bureau, Apr. 2016), *available at* https://files.consumerfinance.gov/f/201604_cfpb_online-payday-loan-payments.pdf.

[6] Center for Responsible Lending, "Payday Mayday: Visible and Invisible Payday Lending Defaults" (research paper, Center for Responsible Lending, Mar. 31, 2015), *available at* https://www.responsiblelending.org/research-publication/payday-mayday-visible-and. This paper uses data from multiple publicly available sources.

based on the value of the vehicle. Similar to payday loans, vehicle title loans are relatively small but high-cost loans made by fringe financial service providers. Four key differences distinguish vehicle title loans from payday loans. First, as opposed to having due dates that coincide with a borrower's payday, vehicle title loans are often due in about a month, regardless of the borrower's pay frequency. Second, instead of giving the lender a post-dated check or authorization to withdraw payments from a bank account, a vehicle title borrower provides the lender the title to his or her car, which generally must be owned free and clear of any liens. Although the borrower retains use of the car while the loan is outstanding, the lender can repossess and sell the vehicle if payments are not made on time to satisfy the amount owed. Third, vehicle title borrowers do not need to have an account with a bank or a credit union. Finally, while payday loans are offered both in store (at physical locations) and online, vehicle title loans are typically issued at physical locations so the lender can assess the condition of the vehicle.[7]

(7) Many payday and vehicle title lenders offer similar high-cost, closed-end installment loans. These installment loans are characterized by a payment schedule that consists of either multiple fully amortizing payments of similar sizes or a series of smaller payments followed by a larger balloon payment at the end of the loan term. Payday installment loans are offered both in store and online, while vehicle-title installment loans are generally offered only at storefronts, given the need to assess the condition of the vehicle.[8]

(8) Two common features of covered loans are their high cost and their tendency to induce sustained use by borrowers. The average cost of a two-week $500 payday loan is $75, which corresponds to an annual percentage rate (APR) of 391%.[9] A typical vehicle title loan has a term of one month and a median loan size just under $700, with fees that are equivalent to an APR of around 300%.[10] Installment payday loans are generally larger than single-payment payday loans, with a median size of $1,000 storefront and $2,400 online and an overall median APR of 248% storefront and 221% online.[11] Installment vehicle title loans have a median size of $710 and a median APR of 259%.[12] For comparison, the average APR for all credit card accounts in the United States was 12.89% and 14.22% in 2017 and 2018, respectively.[13] The average APR for credit card accounts that were

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7 Consumer Financial Protection Bureau, "Single-Payment Vehicle Title Lending" (Consumer Financial Protection Bureau, May 18, 2016), *available at* https://www.consumerfinance.gov/data-research/research-reports/single-payment-vehicle-title-lending/.

8 Consumer Financial Protection Bureau, "Supplemental Findings on Payday, Payday Installment, and Vehicle Title Loans, and Deposit Advance Products" (Consumer Financial Protection Bureau, June 2, 2016), *available at* https://www.consumerfinance.gov/data-research/research-reports/supplemental-findings-payday-payday-installment-and-vehicle-title-loans-and-deposit-advance-products/.

9 *Supra* note 3, at 9.

10 *Supra* note 7, at 6.

11 *Supra* note 8, at 13.

12 *Id.*

13 Board of Governors of the Federal Reserve System, "Consumer Credit – G.19," Apr. 5, 2019, *available at* https://www.federalreserve.gov/releases/g19/current/.

assessed interest was 14.44% and 16.04% in 2017 and 2018, respectively.[14] The average APR for new car loans from financial companies in 2017 and 2018 was 5.4% and 6.1%, respectively.[15]

(9) Payday loans are often advertised as short-term solutions for unexpected expenses such as a medical emergency or a car repair. However, more than half of payday loan borrowers take out payday loans to cover a recurring expense, such as "utilities, credit card bills, rent or mortgage payments, or food," and less than 20% use payday loans to deal with unexpected expenses.[16] After the initial loan is taken out, borrowers of payday loans, on average, renew their debt seven times within the year, which is equivalent to staying indebted for approximately five months.[17] Evidence suggests that the payday lending business model "depends upon heavy usage—often renewals by borrowers who are unable to repay upon their next payday—for its profitability."[18] "In a state with a $15 per $100 rate, an operator . . . will need a new customer to take out 4 to 5 loans before that customer becomes profitable."[19] The financial performance of the payday lending industry is significantly enhanced by the successful conversion of occasional users into chronic borrowers.[20] Despite the recurrent nature of the products, "payday loans continue to be packaged as short-term or temporary products."[21]

(10) Similarly, only one-quarter of borrowers use vehicle title loans for unexpected expenses, while half report using them to pay regular bills.[22] A typical 30-day vehicle title loan is refinanced 8 times.[23] The annual repossession rate, which is the percentage of vehicle title loans that default and have the collateralized vehicles repossessed by the lender, is 6%–11%.[24] For comparison, the percentage of vehicle loans offered by traditional financial service providers that became 90 or more days delinquent (a precursor to being repossessed) during the period 2010–2017 was around 2%.[25] One-

14 *Id*.

15 *Id*.

16 Pew Charitable Trusts, "Payday Lending in America: Who Borrows, Where They Borrow, and Why" (Pew Charitable Trusts, July 19, 2012), ***available at*** https://www.pewtrusts.org/en/research-and-analysis/reports/2012/07/19/who-borrows-where-they-borrow-and-why [hereinafter "Pew (2012)"], 5. This study uses survey data collected by the Pew Charitable Trusts.

17 *Id.*, at 4.

18 *Id.*, at 7.

19 *Id.*, at 7.

20 Michael A. Stegman and Robert Faris, "Payday Lending: A Business Model that Encourages Chronic Borrowing," *Economic Development Quarterly* 17, no. 1 (2003): 8–32 [hereinafter "Stegman and Faris (2003)"]. This paper uses publicly available data from North Carolina.

21 *Supra* note 18.

22 Pew Charitable Trusts, "Auto Title Loans: Market practices and borrowers' experiences" (Pew Charitable Trusts, Mar. 25, 2015), ***available at*** https://www.pewtrusts.org/en/research-and-analysis/reports/2015/03/auto-title-loans, 1. This study uses both survey data collected by the Pew Charitable Trusts and publicly available data.

23 Center for Responsible Lending, "Car Title Lending: Disregard for Borrowers' Ability to Repay" (Center for Responsible Lending, May 13, 2014), ***available at*** https://www.responsiblelending.org/research-publication/car-title-lenders-ignore, 3. This paper uses private data from the car title lending industry.

24 *Supra* note 22.

25 Federal Reserve Bank of New York, "Quarterly Report on Household Debt and Credit, 2018 Q4," Feb. 2019, ***available at*** https://www.newyorkfed.org/microeconomics/hhdc.html, 14.

third of all vehicle title loan borrowers do not have another working vehicle in their households other than the vehicle used as collateral to secure the loan.[26]

(11) Other segments of the high-cost, short-term credit market exhibit a similar pattern of sustained usage through frequent renewal. Twenty percent of vehicle title installment loans are refinanced, which means that a subsequent installment loan was used to repay the loan or was taken out the same day that the prior loan was repaid, while 37% of payday installment loans are refinanced.[27]

26 *Supra* note 22.

27 *Supra* note 8.

III. Borrowers of covered loans are disproportionately low-income and disproportionately minorities

(12) A key question in the literature is who uses covered loans. On this question, lenders of covered loans argue that their customers are primarily middle class.[28] Lenders of covered loans cite a 2001 study by Gregory Elliehausen and Edward Lawrence that shows that more than half of the consumers of payday loans have an annual family income between $25,000 and $49,999.[29] The payday lending industry generally interprets this statistic as showing that their primary consumers are middle class and thus asserts that payday lending does not take advantage of the poor and underprivileged.[30] Similarly, the auto title lending industry also relies on "questionable data to conclude that its customers are predominantly middle class."[31] Todd Zywicki claims that "the typical title loan customer for [the American Association of Responsible Auto Lenders] members is 44 years old and has a household income of more than $50,000 per year."[32]

(13) Several studies criticize the findings by Elliehausen and Lawrence.[33] Moreover, a number of studies show important differences between payday loan borrowers and non-payday loan borrowers along the dimensions of income, race, and ethnicity. For example, using data from the 2007 Survey of Consumer Finance, Amanda Logan and Christian Weller find that the average family that took out a payday loan has substantially lower income, is less likely to have savings, and is less likely to be a homeowner than the average family without payday loans.[34] Specifically, Logan and Weller find that

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28 *See, e.g.*, Nathalie Martin and Ernesto Longa, "High-Interest Loans and Class: Do Payday and Title Loans Really Serve the Middle Class?" *Loyola Consumer Law Review* 24, no. 4 (2012): 530 [hereinafter "Martin and Longa (2012)"]. This study contains a detailed review of the studies on both sides of the "middle class myth" and their own analysis on the income level of payday loan borrowers in New Mexico using publicly available data. For comparison, Pew (2012) finds that payday borrowing is concentrated among households with annual income less than $40,000.

29 Gregory Elliehausen and Edward Lawrence, "Payday Advance Credit in America: An Analysis of Customer Demand" (Credit Research Center, Washington, DC, 2001). This study also finds payday loan borrowers are primarily and disproportionately young adults (younger than 45), primarily married or living with partner but disproportionately divorced or separated, primarily and disproportionately either younger than 45 and married with children or at any age and unmarried with children, and primarily and disproportionately lack of college degree. In addition, disproportionately low percentages of payday loan borrowers have bank cards compared to the general adult population. This paper uses private data from a payday lending industry trade group.

30 "It may seem obvious that few middle class people would choose to pay 300% interest or more for a short-term credit product. Nevertheless, payday and title lenders . . . repeatedly claim that these lenders draw their clientele primarily from the middle class." Martin and Longa (2012).

31 Martin and Longa (2012), 532.

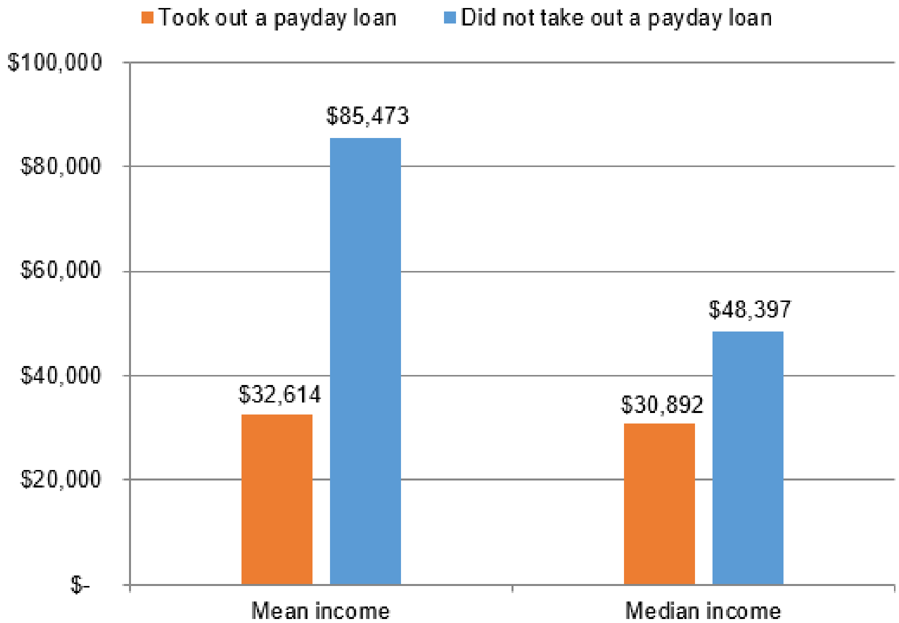
32 Todd Zywicki, "Consumer Use and Government Regulation of Title Pledge Lending," *Loyola Consumer Law Review* 22, no. 4 (2010): [hereinafter "Zywicki (2010)"] 442. This paper uses data from multiple publicly available sources.

33 *See, e.g.*, Martin and Longa (2012) and John Caskey, "Payday Lending: New Research and the Big Question" (working paper, Federal Reserve Bank of Philadelphia, 2010) [hereinafter "Caskey (2010)"]. Martin and Longa (2012) point out the potential response bias in telephone and the low 8% response rate (427 interviewers of the 5,364 sample responded and finished the telephone survey). Caskey (2010) notes that data from consumer telephone survey are less reliable than data coming directly from lenders or regulators, as survey data are not corroborated by documentary evidence.

34 Amanda Logan and Christian Weller, "Who Borrows From Payday Lenders? An Analysis of Newly Available Data"

the median and mean income of payday loan borrowers was $30,892 and $32,614, respectively, while individuals who did not take out payday loans have a respective median and mean income of $48,397 and $85,473.[35] Figure 1 compares the average and median income of payday loan borrowers to non-payday loan borrowers.

Figure 1. Payday loan borrowers have substantially lower incomes



Source: Logan and Weller (2009).

(14) Several studies find consumers of covered loans to be disproportionately African American[36] and disproportionately Hispanic.[37] Researchers at the Pew Charitable Trusts utilize a logistic regression

(CAP report, Center for American Progress, Mar. 2009), *available at* https://cdn.americanprogress.org/wp-content/uploads/issues/2009/03/pdf/payday_lending.pdf [hereinafter "Logan and Weller (2009)"]. This paper uses publicly available data from the Federal Reserve.

35 *Id.*, at 8.

36 *See, e.g.*, Pew (2012) and Mary Caplan, Peter Kindle, and Robert Nielsen, "Do We Know What We Think We Know about Payday Loan Borrowers? Evidence from the Survey of Consumer Finances," *Journal of Sociology & Social Welfare* 44, no. 4 (2017): 19–43 [hereinafter "Caplan et al. (2017)"] on consumers of payday loans. Caplan et al. (2017) use data from the 2013 Survey of Consumer Finances. *See, e.g.*, Kathryn Fritzdixon, Jim Hawkins, and Paige Marta Skiba, "Dude Where's My Car Title? The Law, Behavior, and Economic of Title Lending Markets," *University of Illinois Law Review*, 2014, no. 4: 1014–58 [hereinafter "Fritzdixon et al. (2014)"] on consumers of auto title loans. For consumers of multiple types of high-cost fringe lending products (including payday loans and vehicle title loans), *see* Rob Levy and Joshua Sledge, "A Complex Portrait: An Examination of Small-Dollar Credit Consumers" (CFSI report, Center for Financial Services Innovation, Aug. 2012), *available at* https://www.fdic.gov/news/conferences/consumersymposium/2012/a%20complex%20portrait.pdf [hereinafter "Levy and Sledge (2012)"]. Fritzdixon et al. (2014) and Levy and Sledge (2012) use survey data collected by the authors. For the unbanked and underbanked population, *see* Federal Deposit Insurance Corporation, "2015 FDIC National Survey of Unbanked and Underbanked Households" (FDIC Report, Oct. 20, 2016), *available at* https://www.fdic.gov/householdsurvey/2015/2015report.pdf [hereinafter "FDIC (2016)"]; and Federal Deposit Insurance Corporation, "2017 FDIC National Survey of Unbanked and Underbanked Households" (FDIC report, Oct. 2018),

model to evaluate how certain characteristics relate to payday credit usage, while controlling for factors such as age, gender, education, marital status, paternal status, and income. They find that the odds of using payday credit are 105% higher for African Americans than for other races and ethnicities.[38]

(15) Mary Caplan and co-authors use the 2013 Survey of Consumer Finance data and regression techniques to study what borrowers are more likely to use payday loans. They find payday loan borrowers are more likely to be African American, to lack a college degree, and to live in a home they do not own. Recipients of social assistance were approximately five times more likely to be payday loan borrowers than those who did not receive social assistance.[39] Figure 2 shows that the proportion of whites among payday loan borrowers is 22 percentage points lower than the proportion of whites in the general population. By contrast, the proportions of African Americans and Hispanics among payday loan borrowers are significantly higher than the proportions of the two groups in the general population (20 percentage points higher for African Americans and 4 percentage points higher for Hispanics).[40]

available at https://www.fdic.gov/householdsurvey/2017/2017report.pdf [hereinafter "FDIC (2018)"]. Both FDIC (2016) and FDIC (2018) use publicly available data from the FDIC.

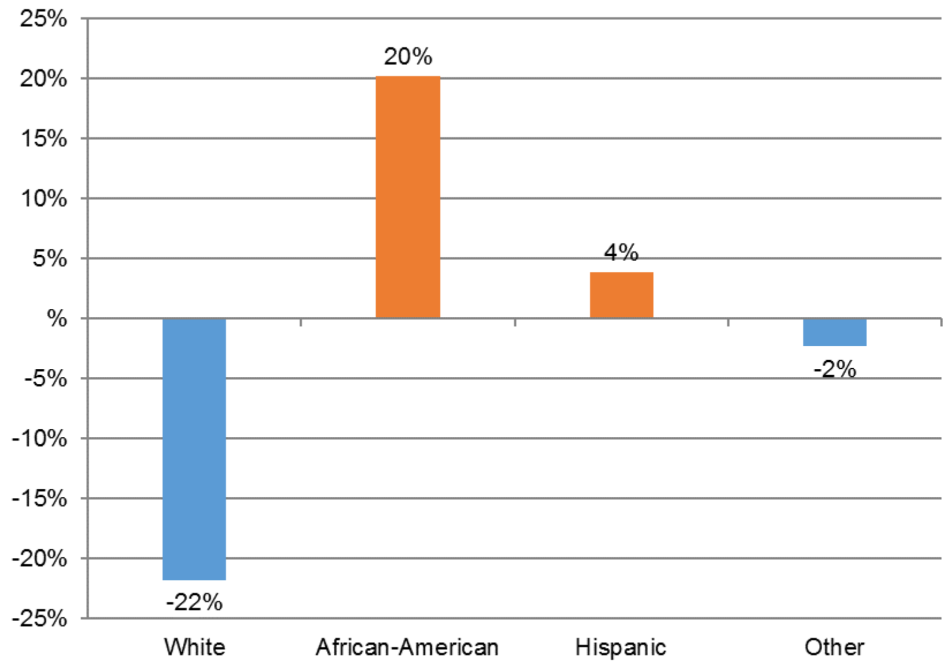
37 *See, e.g.*, Fritzdixon et al. (2014) on consumers of auto title loans, Levy and Sledge (2012) on consumers of multiple types of high-cost fringe lending products (including payday loans and vehicle title loans), and FDIC (2016) and FDIC (2018) on the unbanked and underbanked population.

38 Pew (2012), 9.

39 Caplan et al. (2017).

40 *Id.*, at 32.

Figure 2. Payday loan borrowers are disproportionately African Americans and Hispanics



Source: Caplan et al. (2017).

(16) Michael Stegman and Robert Faris find that, in North Carolina, lower-income African American families are more than twice as likely to have taken out a payday loan as non-Hispanic white families.[41] Contrary to the authors' expectation, Hispanic families are less likely to take out payday loans than non-Hispanic white families, potentially due to a higher tendency to use pawnshops among Hispanic families in North Carolina.[42]

(17) Kathryn Fritzdixon and co-authors conducted a survey in 2012 of 450 vehicle title borrowers in three states (Texas, Idaho, and Georgia). Comparing the racial composition of vehicle title borrowers with statewide figures, they find that, in two of the three states, vehicle title consumers are disproportionately African American (Texas and Georgia) and disproportionately Hispanic (Idaho and Georgia).[43]

(18) Rob Levy and Joshua Sledge find a disproportionately high concentration of African Americans and Hispanics among consumers of "small-dollar credits," a generic term encompassing payday loans, vehicle title loans, installment loans, pawn loans, and direct deposit loans.[44]

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41 Stegman and Faris (2003).

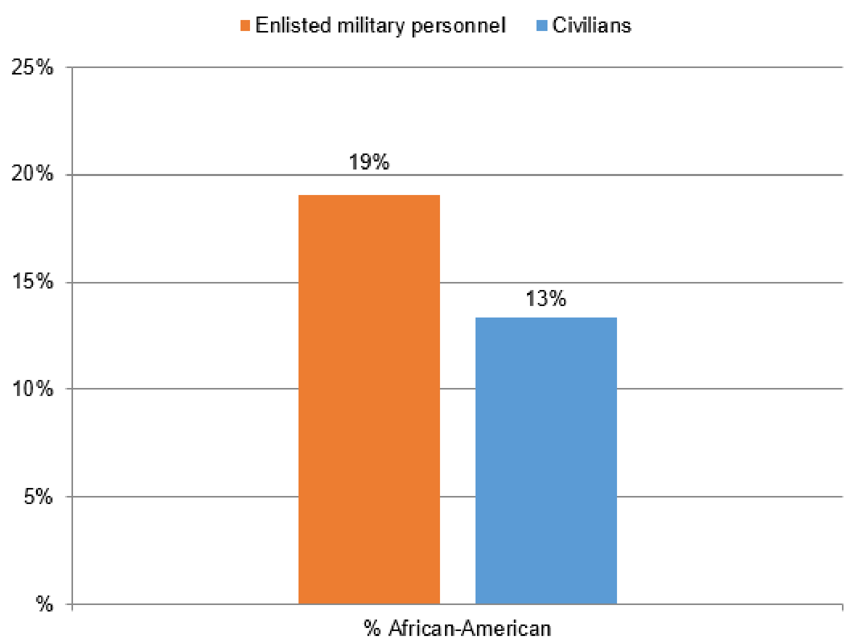
42 *Id.*, at 17.

43 Fritzdixon et al. (2014).

44 Levy and Sledge (2012).

(19) Moreover, researchers find that military personnel are also more likely to take out payday loans. An internal study conducted by the Department of Defense (DOD) estimates that "military members are twice as likely as civilians to be a payday borrower."[45] Steven Graves and Christopher Peterson point out in their 2005 study that the US armed forces have a disproportionately high concentration of African Americans.[46] Figure 3 shows that the proportion of African Americans in the enlisted military personnel is much higher than in the civilian population.

Figure 3. US armed forces have a disproportionately high concentration of African Americans



Source: Population Representation in the Military Services, Fiscal Year 2017, Table B-17.

45 US Department of Defense, "Report on Predatory Lending Practices Directed at Members of the Armed Forces and Their Dependents" (DOD report, Aug. 9, 2006), *available at* http://archive.defense.gov/pubs/pdfs/report_to_congress_final.pdf, 13. This report uses survey data collected by the US Department of Defense.

46 Steven Graves and Christopher Peterson, "Predatory Lending and the Military: The Law and Geography of 'Payday' Loans in Military Towns," *Ohio State Law Journal* 66, no. 4 (2005): 653–832. This paper uses data from multiple publicly available sources.

IV. Lenders of covered loans target communities with a high concentration of minorities

(20) Studies using geographic locations of lenders of covered loans in several states find evidence that the numbers of lenders of covered loans are higher in communities with high concentrations of low-income individuals/households,[47] African Americans,[48] Hispanics,[49] immigrants,[50] and others less likely to speak English.[51] In addition, communities in which a high concentration of residents are younger,[52] elderly,[53] undereducated,[54] and receive public assistance[55] also appear to have significantly more storefront locations and a higher density of lenders of covered loans.

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[47] *See, e.g.*, Steven Graves, "Landscapes of Predation, Landscapes of Neglect: A Location Analysis of Payday Lenders and Banks," *The Professional Geographer* 55, no. 3 (2003): 303–17 [hereinafter "Graves (2003)"]; William Apgar and Christopher Herbert, "Subprime Lending and Alternative Financial Service Providers: A Literature Review and Empirical Analysis" (US Department of Housing and Urban Development, Office of Policy Development and Research paper, 2006), *available at* https://www.huduser.gov/Publications/pdf/sublending.pdf [hereinafter "Apgar and Herbert (2006)"]; Alice Gallmeyer and Wade Roberts, "Payday Lenders and Economically Distressed Communities: A Spatial Analysis of Financial Predation," *Social Science Journal* 46 (2009): 521–38 [hereinafter "Gallmeyer and Roberts (2009)"]; and Martin and Longa (2012) on locations of payday lenders. Similar results are found in studies on other types of high-cost fringe lenders. *See* Matt Fellowes and Mia Mabanta, "Banking on Wealth: America's New Retail Banking Infrastructure and Its Wealth-Building Potential" (Brookings Institution, Jan. 22, 2008), *available at* https://www.brookings.edu/research/banking-on-wealth-americas-new-retail-banking-infrastructure-and-its-wealth-building-potential/ on locations of payday lenders and pawnshops. All of these studies use publicly available data.

[48] *See, e.g.*, Graves (2003); Matt Burkey and Scott Simkins, "Factors Affecting the Location of Payday Lending and Traditional Banking Services in North Carolina," *Review of Regional Studies* 34, no. 2 (2004): 191–205 [hereinafter "Burkey and Simkins (2004)"]; Uriah King, Wei Li, Delvin Davis, and Keith Ernst, "Race Matters: The Concentration of Payday Lenders in African-American Neighborhoods in North Carolina" (Center for Responsible Lending, Mar. 22, 2005), *available at* https://www.responsiblelending.org/research-publication/race-matters-concentration-payday-lenders-african-american-neighborhoods-0 [hereinafter "King et al. (2005)"]; Wei Li, Leslie Parrish, Keith Ernst, and Delvin Davis, "Predatory Profile: The Role of Race and Ethnicity in the Location of Payday Lenders in California" (Center for Responsible Lending, Mar. 26, 2009), *available at* https://www.responsiblelending.org/research-publication/predatory-profiling [hereinafter "Li et al. (2009)"]; and Delvin Davis, "Mile High Money: Payday Stores Target Colorado Communities of Color" (Center for Responsible Lending, Feb. 2018) [hereinafter "Davis (2018)"] on locations of payday lenders. Similar results are found in studies on other types of high-cost fringe lenders. *See, e.g.*, Robin Prager, "Determinants of the Locations of Payday Lenders, Pawnshops and Check-Cashing Outlets" (working paper 2009-33, Finance and Economics Discussion Series, Federal Reserve Board, 2009) [hereinafter "Prager (2009)"] on locations of payday lenders, pawnshops, and check cashers; and Kenneth Temkin and Noah Sawyer, "Analysis of Alternative Financial Service Providers" (research report, The Urban Institute, Feb. 18, 2004), *available at* https://www.urban.org/research/publication/analysis-alternative-financial-service-providers [hereinafter "Temkin and Sawyer (2004)"] on locations of multiple types of high-cost fringe lenders (including payday and vehicle title lenders) in several geographic regions. King et al. (2005) use data collected by authors. Prager (2009) uses publicly available data from the Federal Reserve. Burkey and Simkins (2004), Temkin and Sawyer (2004), Li et al. (2009), and Davis (2018) use multiple publicly available data sources.

[49] *See, e.g.*, King et al. (2005), Apgar and Herbert (2006), Li et al. (2009), and Davis (2018) on locations of payday lenders. Similar results are found in studies on other types of high-cost fringe lenders. *See, e.g.*, Temkin and Sawyer (2004) on locations of multiple types of high-cost fringe lenders (including payday and vehicle title lenders) in several geographic regions, and Jane Cover, Amy Fuhrman Spring, and Rachel Garshick Kleit, "Minorities on the Margins? The Spatial Organization of Fringe Banking Services," *Journal of Urban Affairs* 33, no. 3 (2011) on locations of payday lenders, check cashers, and pawnbrokers. This paper uses data from multiple publicly available sources.

[50] *See* Apgar and Herbert (2006).

[51] *See* Burkey and Simkins (2004).

[52] *Id.*

(21) Mark Burkey and Scott Simkins study the location of banks and payday lenders in North Carolina and find that areas with higher numbers of payday lenders have a higher concentration of African American and Hispanic residents, as well as people who are less educated, are recent immigrants, and receive public assistance. In a regression analysis, they find that even after controlling for income, "urban-ness," income inequality, and education, race is still a significant factor in determining the number of payday lenders in a ZIP code tabulation area. In particular, they find that a 1% increase in the population of African Americans would increase the number of payday lenders by 1% and reduce the number of banks by 1%. A similar effect is found for increases in the Hispanic population, although it is not statistically significant.[56]

(22) Uriah King and co-authors find similar results in a study of payday lenders in North Carolina at the census tracts level.[57] The top fifth of census tracts by proportion of African Americans had more than four times as many storefront payday lenders per capita as the bottom fifth of census tracts, even after controlling for the effects of income and other variables. The concentration of payday lending stores increases as the concentration of African Americans increases.[58]

(23) Wei Li and co-authors perform regression analyses to identify the top neighborhood factors that determine the locations of storefront payday lenders in California after controlling for economic differences.[59] They examine (1) the proximity of payday lenders, defined as the distance from the center of a geographic region, i.e. census block group,[60] to the nearest payday lender, and (2) the concentration of payday lenders around the census block group.

(24) As shown in Figure 4 and Figure 5, the authors find that the population of African Americans and Latinos explains more than 50% of the proximity and concentration of storefront payday lenders. This means that more than half of the variation in the proximity and concentration of payday storefronts is driven by the differences in the proportion of African Americans and Latinos in a given census block

53 *See* Gallmeyer and Roberts (2009).

54 *See, e.g.*, Burkey and Simkins (2004), Apgar and Herbert (2006), and Prager (2009).

55 *See, e.g.*, Burkey and Simkins (2004), Apgar and Herbert (2006), and Caplan et al. (2017).

56 Burkey and Simkins (2004).

57 Census tracts are small, relatively permanent statistical subdivisions of a county or equivalent entity and generally have a population between 1,200 and 8,000 people, with an optimum size of 4,000 people. *See* United States Census Bureau, "Glossary," United States Census Bureau, *available at* https://www.census.gov/glossary/.

58 King et al. (2005).

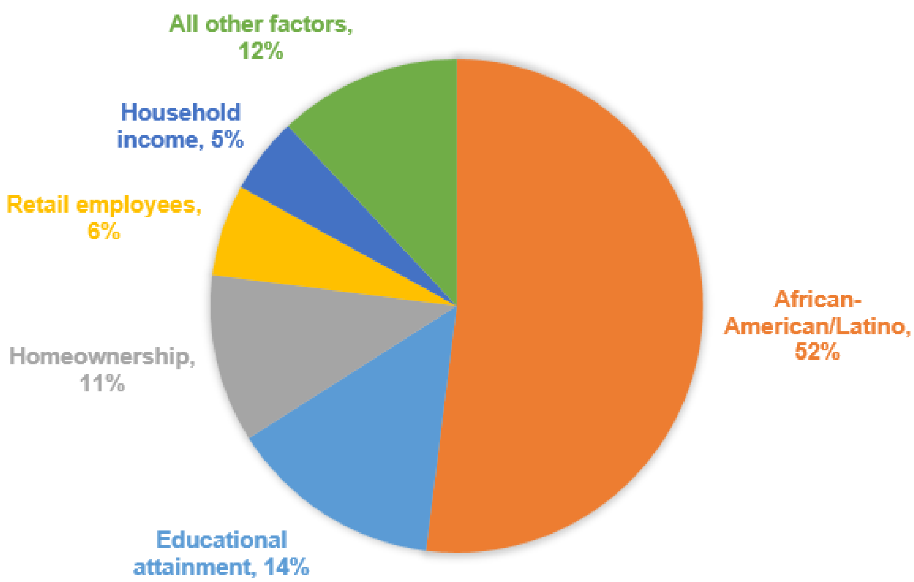
59 Li et al. (2009).

60 Census blocks are statistical areas bounded by visible features, such as streets, roads, streams, and railroad tracks, and by nonvisible boundaries, such as selected property lines and city, township, school district, and county limits and short line-of-sight extensions of streets and roads. A cluster of blocks within the same census tract that have the same first digit of their four-digit census block number consists a census block group. Census block groups are generally defined to contain between 600 and 3,000 people, and are used to present data and control block numbering. United States Census Bureau, "Glossary," United States Census Bureau, *available at* https://www.census.gov/glossary/.

group. In contrast, education attainment and household income explain only 14% and 5%, respectively, of payday lender proximity.

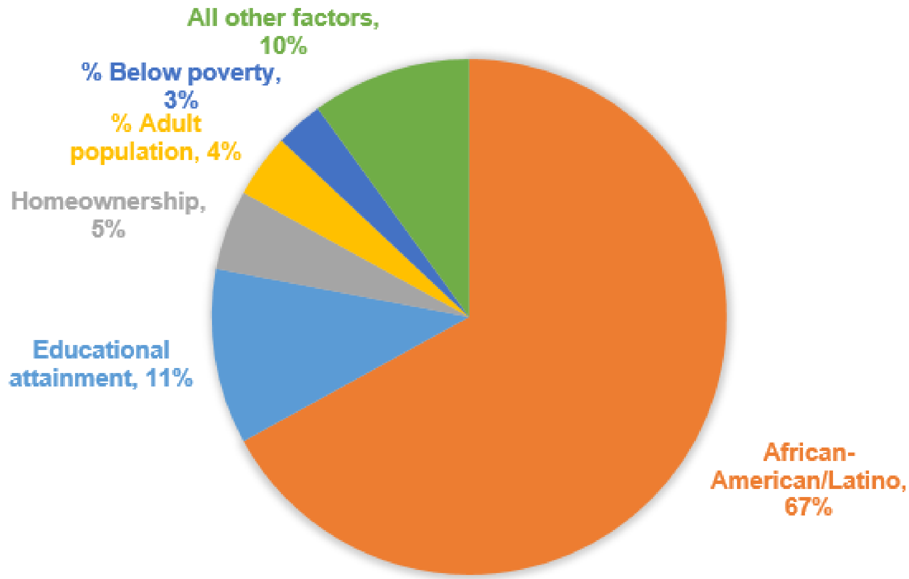
(25) For comparison purpose, Figure 6 and Figure 7 show that the biggest neighborhood factors explaining the proximity and concentration of bank branches are the number of retail employees and percentage of homeowners, respectively. Race and ethnicity are not among the top factors in determining the locations of bank branches.

Figure 4: Top neighborhood factors explaining payday lender storefront proximity



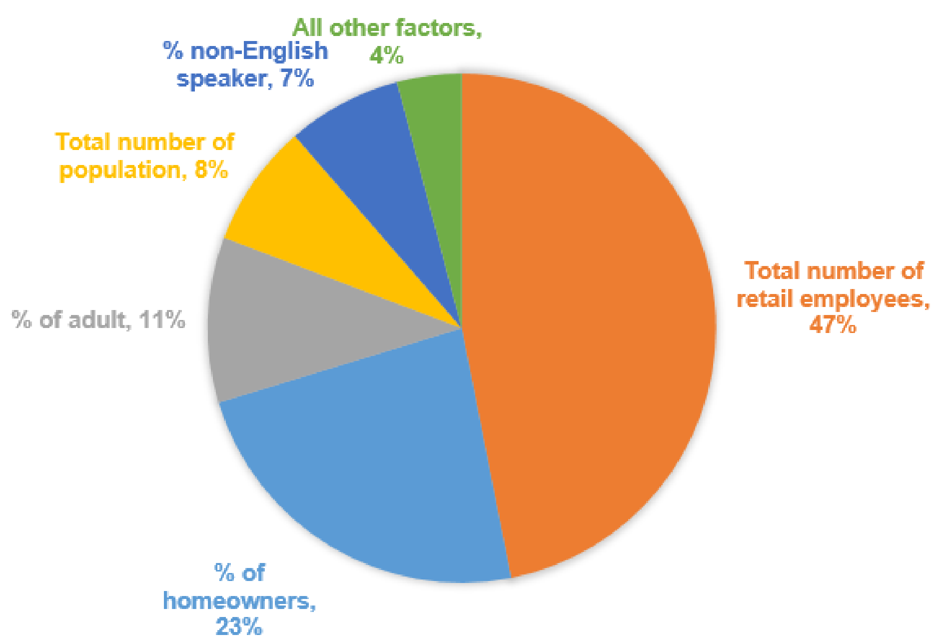
Source: Li et al. (2009).

Figure 5: Top neighborhood factors explaining payday lender storefront concentration



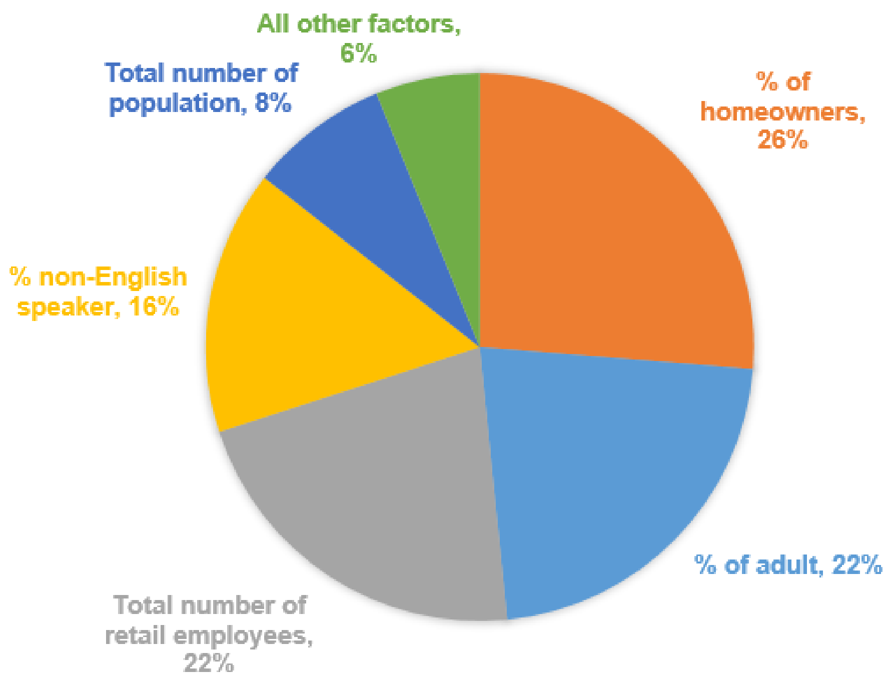
Source: Li et al. (2009).

Figure 6: Top neighborhood factors explaining bank branch proximity



Source: Li et al. (2009).

Figure 7: Top neighborhood factors explaining bank branch concentration



Source: Li et al. (2009).

(26) Robin Prager studies nationwide data and finds that payday lenders are more concentrated in areas where a large percentage of the population is African American. The paper also finds evidence that payday lenders target areas where a higher proportion of the population has no or low credit scores. Similar to Stegman and Faris' finding, Prager does not find a higher concentration of payday lenders in communities with a higher percentage of Hispanic residents.[61]

(27) James Barth and co-authors study the numbers of payday lenders in different states, and analyze how the numbers of payday lenders relate to state-level demographic, financial, and educational characteristics. Using regression techniques, their results show that states with higher percentages of African Americans have significantly more payday lenders, even after controlling for financial and educational characteristics.[62]

(28) Delvin Davis studies the locations of payday lenders in Colorado using 2016 state license data from the Colorado Department of Law. The study finds that census tracts in Colorado with over 50% African American and Latino populations are about twice as likely to have a payday store as all other

[61] Prager (2009).

[62] James Barth, Jitka Hilliard, and John Jahera, "Banks and Payday Lenders: Friends or Foes?" *International Advances in Economic Research* 21, no. 2 (2015): 139–53. This paper uses data from multiple publicly available sources.

areas and seven times more likely to have a payday loan store than predominately white areas (below 10% African American and Latino population).[63] Similar results are also found in Florida.[64]

(29) Graves and Peterson show that, in 19 of the 20 states they studied, payday lenders were located in the counties and ZIP codes adjacent to military bases in significantly greater numbers and densities than other areas.[65] Graves and Peterson contend,

> Some would argue that the neighborhoods [they] have examined near bases suffer from poverty, have large minority populations, or high population densities, but this is not the case. [They] have found most military neighborhoods to be relatively prosperous, not particularly crowded, and generally unremarkable from a demographic standpoint. Indeed, in several instances, such as Oceanside, California, the neighborhood adjacent to the military base is affluent and without a large minority population.[66]

(30) As mentioned earlier, the US armed forces have a disproportionately high concentration of African Americans, and an academic study has found that the closure of Fort Ritchie Army Garrison reduced demographic diversity, in particular the population of African Americans in nearby communities in Cascade, Maryland dropped following the closure.[67]

(31) Following this study, the DOD conducted an internal study on the prevalence of payday lending to military personnel and found that "predatory lending undermines military readiness, harms the morale of troops and their families, and adds to the cost of fielding an all[-]volunteer fighting force."[68] These studies led to the legislation of a federal cap on loan rates to military members and their families (36% APR, effective October 1, 2007).[69]

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63 Davis (2018).

64 Brandon Coleman and Delvin Davis, "Perfect Storm: Payday Lenders Harm Florida Consumers Despite State Law" (policy brief, Center for Responsible Lending, Mar. 2016), *available at* http://www.responsiblelending.org/sites/default/files/nodes/files/research-publication/crl_perfect_storm_florida_mar2016.pdf. This paper uses data collected from the Florida Office of Financial Regulation.

65 *Supra* note 46.

66 *Id.*, at 825.

67 *See* Office of the Under Secretary of Defense, Personnel and Readiness, "Population Representation in the Military Services: Fiscal Year 2017 Report," Table B-17 (population report, US Department of Defense, 2017), *available at* http://cna7.cna.org/PopRep/2017/appendixb/b_17.html; and Meridith Hill Thanner, "Military Base Closure Effects on a Community: The Case of Fort Ritchie Army Garrison and Cascade, Maryland" (PhD dissertation, University of Maryland, College Park, 2006), 152. This paper uses data from the US Census Bureau and data collected by the author.

68 *Supra* note 45, at 9.

69 Scott Carrell and Jonathan Zinman, "In Harm's Way? Payday Loan Access and Military Personnel Performance," *Review of Financial Studies* 27, no. 9 (2014): 2805–40 [hereinafter "Carrell and Zinman (2014)"] at 2806. This paper uses data from multiple publicly available sources.

(32) Although many studies show that lenders of covered loans geographically target minority communities, some studies show inconclusive results. For example, Neil Bhutta finds that neighborhood racial composition has little influence on payday lender store locations, conditional on income, wealth, and demographic characteristics.[70]

(33) Creola Johnson explains that another way lenders of covered loans target minorities is through marketing. "These lenders attract minority borrowers through the use of minority celebrities and community leaders because many of these prospective borrowers are more likely to obtain a predatory loan when it is marketed by someone considered trustworthy in their communities."[71] Payday lenders also target communities of color by hiring minority employees in key positions, such as store managers or loan officers, to "enable them to easily build rapport within the targeted community of color."[72] Johnson notes the example of William Harrod, a whistleblower who testified to persuade the city council of Washington, D.C., to pass legislation to help curb payday lending. Johnson notes, "Harrod testified that he was told by management to go to low-income apartment buildings that were known to be predominantly black and offer the building managers referral fees if their residents signed up for Check 'n Go's payday loans."[73] Similarly, a former store manager, Michael Donovan, testified that "[w]e seek out low-income African-American and Latino neighborhoods [in Washington, D.C.,] because we know that this is where our most profitable client base is located."[74]

(34) Jim Hawkins reviews payday and vehicle title loan advertisements in Houston, Texas, between September and October 2014. Hawkins finds that the percentages of pictures with minorities in storefront and online advertisements in Texas outnumbered the percentage of minorities in the general population in Texas, and even outnumbered the percentage of minorities among actual users of payday loans and vehicle title loans. Figure 8 shows the percentages of storefront advertisements with pictures of minorities in Houston, Texas.[75]

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70 Neil Bhutta, "Payday Loans and Consumer Financial Health," *Journal of Banking and Finance* 47 (2014) [hereinafter "Bhutta (2014)"]. This study uses data from the Census Bureau and the Federal Reserve Bank of New York.

71 Creola Johnson, "The Magic of Group Identity: How Predatory Lenders Use Minorities to Target Communities of Color," *Georgetown Journal on Poverty Law & Policy*, 17, no. 2 (2010): 169. This study uses data from multiple publicly available sources.

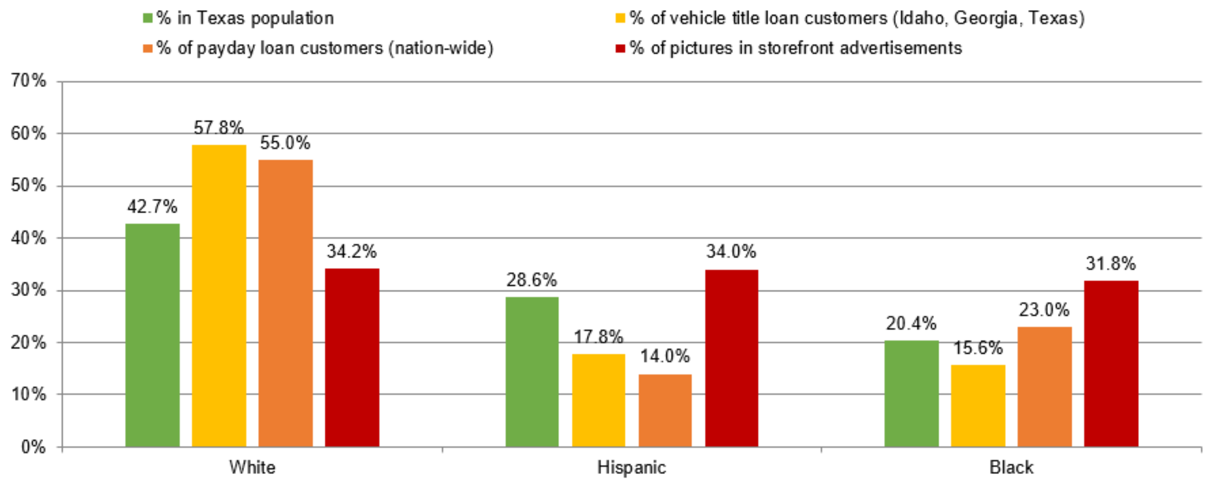
72 *Id.*, at 174.

73 *Id.*, at 175. *See also* William Harrod, Store Manager, Check 'n Go, Statement at the Ohio Coalition of Responsible Lending's D.C. press conference, Sept. 12, 2007, *available at* https://kyresponsiblelending.wordpress.com/the-press-editorials-articles-etc/harrod-testimony-against-check-n-go/. ("We didn't restrict our marketing to businesses in the District [of Columbia][,] [w]e went into Maryland, to College Park, Landover, Laurel, Bowie—always to areas with a high percentage of black customers.").

74 Michael Donovan, Director of Operations, Check 'n Go, Statement at the Ohio Coalition of Responsible Lending's D.C. press conference, Sept. 12, 2007, *available at* https://kyresponsiblelending.wordpress.com/the-press-editorials-articles-etc/statement-of-michael-donovan/.

75 Jim Hawkins, "Are Bigger Companies Better for Low-Income Borrowers? Evidence from Payday and Title Loan Advertisements," *Journal of Law, Economics, and Policy* 303, no. 11 (2015): 325. This paper uses data collected by the author.

Figure 8: Percentages of storefront payday and vehicle title loan advertisements with pictures of minorities in Houston, Texas



Source: Hawkins (2015).

V. Lenders of covered loans charge higher prices in minority neighborhoods

(35) There is evidence that lenders of covered loans charge higher prices in minority neighborhoods and near military bases. Robert DeYoung and Ronnie Phillips study the prices of 35,098 payday loans that originated in Colorado between 2000 and 2006 and find that higher concentrations of African Americans and Hispanics are associated with small price increases.[76]

(36) Quantitatively, the results suggest that a 10% increase in the African American population in a local market increases the probability of a loan reaching the state rate cap by 1.52% and increases the price of a loan not yet capped by $0.40. Alternatively, a 10% increase in the Hispanic population in a local market increases the probability of a loan reaching the state rate cap by about 1% and the price of a loan not yet capped by $0.28.[77]

(37) The authors point out that these results are consistent with payday lenders charging higher rates for borrowers who have fewer other options to meet their financial needs (i.e., third-degree price discrimination) but that they are also "consistent with race-based price discrimination."[78] They also find that payday loan stores located within a 10-mile radius of military bases charged higher prices on average: these loans were 2.22% more likely to be priced at the state rate cap and, when priced below the cap, were priced $0.69 more expensive.[79]

(38) Although rates on payday loans in neighborhoods with higher concentrations of African Americans are higher in the study discussed above, there is evidence that profitability per payday loan does not significantly differ across geographic locations with different demographics. Mark Flannery and Katherine Samolyk find that, after adjusting for dollar loan volume, neither the income level nor the proportion of African Americans in the neighborhoods where stores are located has significant effects on loan losses, total operating costs, or profitability. Their analysis also does not indicate that repeat borrowers are more profitable than infrequent borrowers are on a per loan basis. However, the study emphasizes that high-frequency borrowers do generate profits by contributing to loan volume.[80]

(39) Several studies also document price discrimination against minorities in traditional banking and mortgage lending. Such discrimination manifests itself in higher costs for African Americans,

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[76] Robert DeYoung and Ronnie Phillips, "Payday Loan Pricing" (working paper, Federal Reserve Bank of Kansas City, 2009). This study uses data from the Colorado Office of the Attorney General.

[77] *Id.*, at 21.

[78] *Id*.

[79] *Id.*, at 21–22.

[80] Mark Flannery and Katherine Samolyk, "Payday Lending: Do the Costs Justify the Price?" (working paper no. 2005-09, FDIC Center for Financial Research, 2005). This study uses proprietary, store-level data provided by two payday firms operating in 22 states.

Hispanics, and minorities in general to open and maintain a bank account or to take out a mortgage, as well as in lower quality of financial services, such as a lower response rate to inquiries and a higher incidence of mis-selling, fraud, and poor customer service by retail banks.[81]

(40) According the 2017 FDIC Survey of Unbanked or Underbanked Households, the unbanked and underbanked rates were higher among African American and Hispanic households than among white households. The survey shows that the top reasons people choose not to use banking services offered by banks are that (1) they do not have enough money to maintain bank accounts and (2) they do not trust banks.[82] Kevin Connor and Matthew Skomarovsky find from SEC filings that major banks provided financing to lenders of covered loans through various credit agreements, including revolving lines of credit and term loans, which lenders of covered loans rely on to fund their operations.[83]

(41) As shown in Figure 9, in a 2015 study Ping Cheng and co-authors analyze data from the Survey of Consumer Finances and find that African Americans, on average, pay a higher interest rate on mortgages than the general population does. Further regression analyses find that, even after controlling for a variety of mortgage and borrower characteristics, African American borrowers pay on average 29 basis points[84] more than comparable white borrowers do, a difference that is both statistically and economically significant.[85]

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81 *See, e.g.*, Harold Black, Robert Schweitzer and Lewis Mandell, "Discrimination in Mortgage Lending," *American Economic Review* 68, no. 2 (1978): 186–91, which uses data from the FDIC; Andra Ghent, Ruben Hernandez-Murillo, and Michael Owyang, "Differences in Subprime Loan Pricing Across Races and Neighborhoods" (working paper, Federal Reserve Bank of St. Louis, 2014), which uses data from the Federal Reserve; Patrick Bayer, Fernando Ferreira, and Stephen Ross, "Race, Ethnicity, and High-Cost Mortgage Lending" (working paper, Human Capital and Economic Opportunity Global Working Group, 2014), which uses data from multiple public and private sources; Ping Cheng, Zhenguo Lin, and Yingchun Liu, "Racial Discrepancy in Mortgage Interest Rates," *Journal of Real Estate Finance and Economics* 51, no. 1 (2015) [hereinafter "Cheng et al. (2015)"], which uses data from the Survey of Consumer Finances; Andrew Hanson, Zackary Hawley, Hal Martin, and Bo Liu, "Discrimination in Mortgage Lending: Evidence from a Correspondence Experiment," *Journal of Urban Economics* 92 (2016): 48–65, which uses data from a correspondence experiment conducted by the authors; Taylor Begley and Amiyatosh Purnanandam, "Color and Credit: Race, Regulation, and the Quality of Financial Services" (SSRN working paper, 2018), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2939923, which uses data from the CFPB; Andreas Fuster, Paul Goldsmith-Pinkham, Tarun Ramadorai, and Ansgar Walther, "Predictably Unequal? The Effects of Machine Learning on Credit Markets" (SSRN working paper, 2018), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3072038, which uses both publicly available and private mortgage data; Robert Bartlett, Adair Morse, Richard Stanton, and Nancy Wallace, "Consumer-Lending Discrimination in the Era of FinTech" (working paper, UC Berkeley, Oct. 2018), *available at* https://faculty.haas.berkeley.edu/morse/research/papers/discrim.pdf, which uses data from multiple publicly available sources; and Jacob Faber and Terri Friedline, "The Racialized Costs of Banking," New America, June 21, 2018, *available at* https://www.newamerica.org/family-centered-social-policy/reports/racialized-costs-banking, which uses data from multiple publicly available sources and proprietary business listing data.

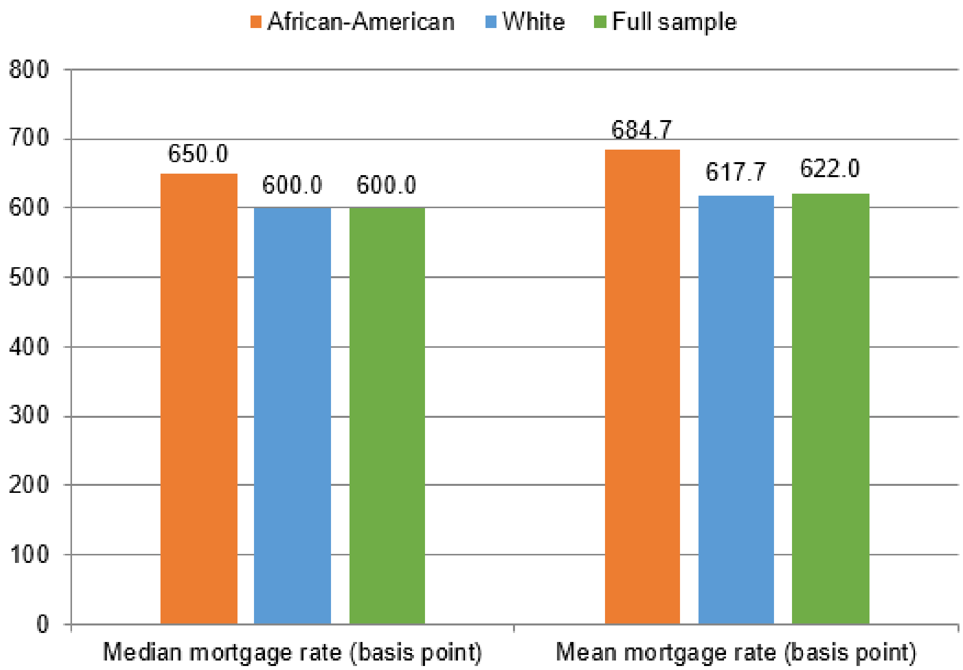
82 FDIC (2018), 3–4.

83 Kevin Connor and Matthew Skomarovsky, "The Predators' Creditors: How the Biggest Banks are Bankrolling the Payday Loan Industry," Public Accountability Initiative, Sept. 4, 2010, *available at* https://public-accountability.org/report/the-predators-creditors/. This paper uses data from multiple publicly available sources.

84 Basis point is a unit of measurement for interest rates, yields, and other percentages in finance. A basis point is one-hundredth of 1%, or 0.01%, or 0.0001. *See, e.g.*, Bruce Tuckman, *Fixed Income Securities, Tools for Today's Markets*, 2nd ed. (Hoboken, NJ: John Wiley & Sons, 2002), 50.

85 Cheng et al. (2015), 112.

Figure 9: African Americans pay on average higher rates on mortgages



Source: Cheng et al. (2015).

VI. Borrowers of covered loans may not understand the loan terms or the risks associated with the loan

(42) A number of studies show that borrowers of covered loans may not understand the loan terms and the risks of prolonged indebtedness associated with taking out a covered loan. These studies show that lenders of covered loans often do not comply with information disclosure laws and regulations, or that borrowers of covered loans tend to have low financial literacy and be overly optimistic or impatient about their future income.

(43) Annamaria Lusardi and Olivia Mitchell find that financial illiteracy is widespread among younger (under age 35), older (older than age 65), and less-educated populations. In particular, African Americans and Hispanics display the lowest level of financial literacy among racial and ethnic groups. Individuals who are financially illiterate are less likely to make long-term plans and accumulate wealth.[86]

(44) Jim Hawkins reviews pictures of payday and title loan advertisements in Houston, Texas, between September and October 2014, and he finds that many lenders did not comply with Texas regulations. Texas regulations require payday lending storefronts to disclose (1) the name and address of the Texas Office of Consumer Credit Commissioner, (2) the notice that loans are intended to be short term, and (3) the rate schedule and three to five examples of common loans. Hawkins finds that 20%–30% of payday websites and 10%–40% of storefront payday advertisements do not comply with those regulations.[87]

(45) In a 2016 study, Hawkins finds evidence of behavioral market failure in the advertisements of prices. Many credit products have teaser periods, that is, an initial period in a loan during which the interest rates are set at a lower level than the rates applicable for the remaining period of the loan.[88] Hawkins finds that more than 15% of payday and title loan storefronts advertise loans with teaser rates, and that more than 17% of payday and title loan websites advertise loans with teaser rates.[89] He argues that the prevalence of teaser rates in payday and title loan advertisements indicates that borrowers are overly optimistic and impatient.[90] The study also indicates that payday and title lenders tailor their

[86] *See* Annamaria Lusardi and Olivia Mitchell, "Financial Literacy and Planning: Implications for Retirement Wellbeing" (NBER Working Paper 17078, Cambridge, MA, 2011); Annamaria Lusardi and Olivia Mitchell, "Financial Literacy and Retirement Planning in the United States," *Journal of Pension Economics and Finance* 10, no. 4 (2011): 509–25; and Annamaria Lusardi and Peter Tufano, "Debt Literacy, Financial Experiences, and Over-Indebtedness," *Journal of Pension Economics and Finance* 14, no. 4 (2015): 332–68. These papers use survey data collected by the authors.

[87] *Supra* note 75, at 311–12.

[88] *See, e.g.*, Brian P. Lancaster, Glenn M. Schultz, and Frank J. Fabozzi, *Structured Products and Related Credit Derivatives: A Comprehensive Guide for Investors* (Hoboken, NJ: John Wiley & Sons, 2008), 81–83.

[89] Jim Hawkins, "Using Advertisements to Diagnose Behavioral Market Failure in the Payday Lending Market," *Wake Forest Law Review* 59 (2016): 71. This paper uses advertising data collected by the author.

[90] *Id.*, at 91.

advertisements to appeal to overly optimistic and impatient borrowers. If borrowers were rational, the majority would have taken advantage of the cheap teaser rate and repaid at the end of the teaser period. However, most consumers do not pay off their loans quickly.

(46) In a different survey study, Ronald Mann finds that about 60% of borrowers are able to predict accurately the length of their indebtedness after taking out a payday loan.[91] However, based on the prevalence of teaser rates, Hawkins concludes that

> [e]ven if Mann is correct that some borrowers can accurately guess how long they will keep out their loans, teaser rates lack a rational choice explanation. [Assuming Mann is correct, the teaser periods] are short-term price cuts for borrowers who believe they will have the product long term. [This adds] another layer of evidence that firms believe that at least some borrowers are overly optimistic or overly fixated on initial pricing and will be enticed into taking out loans and keeping them out for longer periods of time. The presence and prevalence of teaser rates indicate that some payday and title lending borrowers are not acting rationally.[92]

(47) Marianne Bertrand and Adair Morse conduct a field experiment and a phone survey and find evidence that borrowers may have chosen payday loans based on incomplete or miscomprehended information. The field experiment finds that showing comparisons between the accumulated fees associated with repeated payday borrowing versus the comparable cost of credit card debt is most effective in reducing the usage of payday borrowing. A one-time intervention (providing information on the accumulation of fees to a consumer) reduces the probability of taking out a payday loan during the following four months by about 11%.[93]

(48) In its 2017 Final Rule, the Consumer Financial Protection Bureau (CFPB) notes the result from this field experiment and states that the disclosures of risks and costs of reborrowing have "a marginal

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91 Ronald Mann, "Assessing the Optimism of Payday Loan Borrowers," *Supreme Court Economic Review* 21, no. 1 (2015): 105–32. The survey was conducted with the cooperation of a single payday lender making loans in five states and was administered at a limited number of locations. In this survey, participants were asked: "We'd like to understand more about your overall financial picture. How long do you think it will be before you have saved enough money to go an entire pay period without borrowing from this lender? If you aren't sure, please give your best estimate." The survey result shows that (1) 57% of borrowers are generally accurate (within a 14-day window) in their predictions, (2) 40% borrowers anticipated they would continue their borrowing after its original due date, and (3) borrowers were about as likely to overestimate their times in debt as they were to underestimate them. In its 2017 Final Rule, the CFPB reviewed the data that Mann studied and concluded that "the data … provide strong evidence that these borrowers who experience long periods of indebtedness did not anticipate those experiences[,] . . . that even short-term borrowers do not fully expect the outcomes they realize[,] . . . and that regardless of whether borrowers experienced short or long durations of indebtedness, they did not systematically predict their outcomes with any sort of accuracy or precision." *See* 2017 Final Rule, at 54816–17.

92 *Supra* note 89, at 92.

93 Marianne Bertrand and Adair Morse, "Information Disclosure, Cognitive Biases, and Payday Borrowing," *Journal of Finance* 66, no. 6 (2011): 1865–93 [hereinafter "Bertrand and Morse (2011)"]. This paper uses survey data collected by the authors in conjunction with payday lending stores.

effect on the total volume of payday borrowing."[94] Adding to this study, the CFPB analyzes similar disclosures implemented by the State of Texas and finds "a reduction in loan volume of 13 percent after the disclosure requirement went into effect, relative to the loan volume changes for the study period in comparison States."[95] However, the CFPB's analysis shows that "the probability of re-borrowing on a payday loan declined by only approximately two percent once the disclosure was put in place."[96] The CFPB concludes in its 2017 Final Rule that disclosure requirements have limited effects and that "the core harms to consumers in this credit market remain even after a disclosure regime is put in place."[97]

(49) In addition, Bertrand and Morse conduct a follow-up phone survey with consenting participants of the experiment to ask questions concerning how individual borrowers understand the terms and the finance of their borrowing. They ask participants three questions:

1. "To the best of your knowledge, what is the annual percentage rate, or APR, on the typical payday loan in your area?"
2. "To the best of your knowledge, how much does it cost in fees to borrow $300 for three months from a typical payday lender in your area?"
3. "What's your best guess of how long it takes the average person to pay back in full a $300 payday loan? Please answer in weeks."

(50) The survey results reveal that many borrowers think the annual APR is the dollar cost per hundred they borrow, and that most borrowers answer that the total cost of a three-month payday loan is the fee associated with one loan cycle. The mean answer to the debt duration question is about five to six weeks, but the most common answer is one cycle (two weeks). While the authors note the low response rate of the phone survey, they emphasize that the results provide general information on the relevance of cognitive miscomprehension of payday loan borrowers.[98]

(51) In its 2017 Final Rule, the CFPB makes three points regarding the phone survey results. First, due to the way the question was asked, it is "difficult to be certain that some survey respondents did not conflate the time during which the loans are outstanding with the contract term of individual loans."[99] Second, "[p]eople's beliefs about their own re-borrowing behavior could also vary from their beliefs about average borrowing behavior by others."[100] Finally, "[t]his study also did not specifically

[94] 2017 Final Rule, at 54852.

[95] *Id.*, at 54577.

[96] *Id.*, at 54577–626.

[97] *Id.*, at 54578.

[98] Bertrand and Morse (2011): 1876–78.

[99] 2017 Final Rule, at 54568.

[100] *Id.*

distinguish other borrowers from the subset of borrowers who end up in extended loan sequences."[101] The CFPB concludes in the 2017 Final Rule that this survey is "only informative about how accurate borrowers' predictions are about the average."[102]

[101] *Id.*

[102] *Id.*

VII. Access to covered loans can have negative impacts on consumers

(52) In addition to the risk of prolonged indebtedness that consumers may not be fully aware of, studies have shown that, in general, access to covered loans can be associated with many negative outcomes.

(53) Negative effects from access to payday loans on military personnel include reduced readiness and performance.[103] Scott Carrell and Jonathan Zinman track the performance of enlisted Air Force personnel and their assignments to bases in different states with various level of access to payday lending. They find that the job performance and retention of airmen declines with payday loan access, and severely poor readiness increases.[104]

(54) Negative outcomes for civilian borrowers of covered loans include increased financial fragility and borrower delinquency, inability to pay important bills and prioritize other liabilities (e.g., child support payments), and the loss of transportation due to vehicle repossession.[105] Sumit Agarwal and co-authors study the relationship between successful applications for payday loans and defaults on credit cards in the following year. Even after controlling for variables capturing concurrent and historical individual credit standing, the usage of payday loans still predicts nearly a doubling in the probability of being 90 days past due on credit card debt during the following year.[106]

103 *See, e.g.*, Carrell and Zinman (2014).

104 Carrell and Zinman (2014).

105 *See, e.g.*, Sumit Agarwal, Paige Marta Skiba, and Jeremy Tobacman, "Payday Loans and Credit Cards: New Liquidity and Credit Scoring Puzzles?" *American Economic Review: Papers and Proceedings* 99, no. 3 (2009) [hereinafter "Agarwal et al. (2009)"], which uses data from a large payday lender; Bart Wilson, David Findlay, James Meehan, Charissa Wellford, Karl Schurter, "An Experimental Analysis of the Demand for Payday Loans," *B.E. Journal of Economic Analysis and Policy* 10 (2010) [hereinafter "Wilson et al. (2010)"], which uses experimental data collected by the authors, on the negative effect of extensive usage of payday loans; Brian Melzer, "The Real Costs of Credit Access: Evidence from the Payday Lending Market," *Quarterly Journal of Economics* 126 (2011): 517–55 [hereinafter "Melzer (2011)"], which uses data from multiple publicly available sources; Dennis Campbell, Asis Martinez-Jerez, and Peter Tufano, "Bouncing Out of the Banking System: An Empirical Analysis of Involuntary Bank Account Closures," *Journal of Banking and Finance* 36, no. 4 (2012): 1224–35, which uses data from multiple publicly available sources; Nathalie Martin and Ozymandias Adams, "Grand Theft Auto Loans: Repossession and Demographic Realities in Title Lending" (working paper, University of New Mexico School of Law Legal Studies Research Paper Series, 2012), which uses data from multiple publicly available sources; Jean Ann Fox, Tom Feltner, Delvin Davis, and Uriah King, "Driven to Disaster: Car-Title Lending and Its Impact on Consumers" (Center for Responsible Lending, Feb. 28, 2013), *available at* https://www.responsiblelending.org/research-publication/driven-disaster, which uses private data from a payday lender as well as data from multiple state-level regulators; Brian Melzer, "Spillovers from Costly Credit," *Review of Financial Studies* 31, no. 9 (2018): 3568–94, which uses data from multiple publicly available data sources; Paige Marta Skiba and Jeremy Tobacman, "Do Payday Loans Cause Bankruptcy?" (working paper, Vanderbilt Law and Economics Research Papers, Nashville, TN, 2011), which uses private data from a payday lender; and John Gathergood, Benedict Guttman-Kenney, and Stefan Hunt, "How Do Payday Loans Affect Borrowers? Evidence from the U.K. Market," *Review of Financial Studies* 32, no. 2 (2019), which uses publicly available data from the UK.

106 Agarwal et al. (2009).

(55) Brian Melzer utilizes the exogenous variation in the travel distance for consumers from a state that prohibits payday loans to payday stores across state borders to gauge the impact of having access to payday lending. The study finds that having access to payday credit (less than 25 miles of travel to a payday-allowing state) increases the likelihood of family hardship by 5 percentage points relative to areas without payday credit access. The likelihood of postponing health care also increases by 4.5 percentage points in areas with access to payday credit relative to areas without.[107]

(56) Suparna Bhaskaran, with the cooperation of three community organizations, conducts a survey with 771 women to identify women's experience in subprime home mortgages loans, payday loans, and student loans.[108] According to the survey response, when asked about the ways that high-cost debt is affecting their personal life and their family, 47% responded that they were unable to save money, 20% responded that they could not afford health care, 19% responded that they had to delay purchasing a car, and 18% responded that they had difficulty affording adequate food.[109] When asked about their experience after taking out high-cost debt, 25% responded that their credit score went down.[110]

(57) Studies find that access to covered loans also has negative implications on consumer wellness.[111] Elizabeth Sweet and co-authors find that usage of fringe loans is associated with poor health conditions such as high blood pressure and anxiety.[112]

(58) Jaeyoon Lee finds that gaining access to payday loans significantly increases the number of suicide attempts by about 10% (equivalent to 5.2 additional attempts per 100,000 people), potentially due to mental health deterioration from financial distress.[113] The increase is particularly high for African

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107 Melzer (2011).

108 Suparna Bhaskaran, "Pinklining—How Wall Street's Predatory Products Pillage Women's Wealth, Opportunities, and Futures," New Jersey Communities United, ACCE Institute, and ISAIAH, June 2016, *available at* https://d3n8a8pro7vhmx.cloudfront.net/acceinstitute/pages/100/attachments/original/1466121052/acce_pinklining_VIEW.pdf?1466121052. See the report for more details on the New Jersey Communities United, ACCE Institute, and ISAIAH.

109 *Id.*, at 24. The author notes that the "intent [of the survey] was not to achieve a random or representative sample, but to reach and survey women in the communities where these organizations work, and identify women's experiences and overall trends."

110 *Id.*, at 25.

111 *See, e.g.*, Elizabeth Sweet, Christopher Kuzawa, and Thomas McDade, "Short-Term Lending: Payday Loans as Risk Factors for Anxiety, Inflammation and Poor Health," *SSM-Population Health* 5 (2018): 114–21 [hereinafter "Sweet et al. (2018)"]; Jerzy Eisenberg-Guyot, Caislin Firth, Marieka Klawitter, and Anjum Hajat, "From Payday Loans to Pawnshops: Fringe Banking, the Unbanked, and Health," *Health Affairs* 37, no. 3 (2018): 429–37 [hereinafter "Eisenberg-Guyot et al. (2018)"]; and Jaeyoon Lee, "Credit Access and Household Well-Being: Evidence from Payday Lending" (working paper, Fudan University, 2019) [hereinafter "Lee (2019)"]. Sweet et al. (2018) use data collected by the authors. Eisenberg-Guyot et al. (2018) and Lee (2019) use data from multiple publicly available sources.

112 Sweet et al. (2018).

113 Lee (2019), 39.

Americans younger than 65—gaining access to payday loans increases suicide attempts by 15.5% (equivalent to 7.1 additional attempts per 100,000 people).[114]

(59) Jerzy Eisenberg-Guyot and co-authors found that fringe borrowing, defined as usage of payday, pawn, or car-title loans, is associated with a 38% higher prevalence of poor or fair health and that being unbanked is associated with a 17% higher prevalence or poor or fair health.[115] Their study states, "[E]xpanding social welfare programs and labor protections could potentially address the root causes of the use of fringe services and advance health equity."[116] Indeed, Heidi Allen and co-authors, as an example, find that the early Medicaid expansion in California was associated with an 11% reduction in the number of payday loans taken out each month, as well as a reduced number of unique borrowers and amount of payday loan debt.[117]

(60) Last, a few studies find payday lending to be associated with several neutral outcomes, such as having little to zero immediate effect on consumers' credit scores and other measures of financial well-being, and insignificant changes in bankruptcy filings.[118] Two of these studies rely on data provided by payday lenders. Other studies, some of which are performed by researchers closely tied to the payday lending industry,[119] find payday lending to be potentially associated with absorbing expenditure shocks (for a moderate amount of borrowing), improved financial conditions, increased consumer surplus, and reduced foreclosures after a natural disaster.[120]

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114 *Id.*, at 44.

115 Eisenberg-Guyot et al. (2018).

116 *Id.*, at 1.

117 Heidi Allen, Ashley Swanson, Jialan Wang, and Tal Gross, "Early Medicaid Expansion Associated with Reduced Payday Borrowing in California," *Health Affairs* 36, no. 10 (2017). This paper uses private data from a payday lending industry trade group.

118 *See, e.g.*, Bhutta (2014); Neil Bhutta, Paige Marta Skiba, and Jeremy Tobacman, "Payday Loan Choices and Consequences," *Journal of Money, Credit, and Banking* 47, no. 2–3 (2015): 223–60, which uses data provided by payday lenders; and Petru Stoianovici and Michael Maloney, "Restrictions on Credit: A Public Policy Analysis of Payday Lending" (working paper, Clemson University, 2012), which uses data from a payday lending industry trade group in addition to publicly available sources.

119 *See* Renae Merle, "How a Payday Lending Industry Insider Tilted Academic Research in Its Favor," *Washington Post*, Feb. 25, 2019, https://www.washingtonpost.com/business/2019/02/25/how-payday-lending-industry-insider-tilted-academic-research-its-favor/?utm_term=.de4a497533ad; and Christopher Werth, "Tracking the Payday-Loan Industry's Ties to Academic Research," Freakonomics, Apr. 6, 2016, *available at* http://freakonomics.com/podcast/industry_ties_to_academic_research/ for payday lending industry's ties to academic research.

120 *See, e.g.*, Wilson et al. (2010); Donald Morgan and Michael Strain, "Payday Holiday: How Households Fare after Payday Credit Bans" (working paper, Federal Reserve Bank of New York, 2008), which uses data from the Federal Reserve; Zywicki (2010); Jonathan Zinman, "Restricting Consumer Credit Access: Household Survey Evidence on Effects around the Oregon Rate Cap," *Journal of Banking and Finance* 34, no. 3 (2010): 546–56, which uses data from multiple publicly available sources; Kelly Edmiston, "Could Restrictions on Payday Lending Hurt Consumers?" *Economic Review* 2011, no. 1: 32–61, which uses data from TransUnion; Donald Morgan, Michael Strain, and Ihab Seblani, "How Payday Credit Access Affects Overdrafts and Other Outcomes," *Journal of Money, Credit and Banking* 44 (2012): 519–31, which uses data from multiple publicly available sources; Jennifer Priestley, "Payday Loan Rollovers and Consumer Welfare" (working paper, 2014), which uses private data from a payday lender. For evidence of payday loans being helpful for low-income households under certain urgent circumstances, *see* Lisa Servon, "Are

VIII. Conclusions

(61) Research on covered loans shows that consumers of covered loans are disproportionately low income and disproportionately African American or Hispanic.

(62) Studies find that lenders of covered loans geographically target minority consumers and communities with high concentration of African American, Hispanic, and low-income households. Several studies present evidence that lenders of covered loans also utilize marketing schemes to target minorities.

(63) There is evidence that lenders of covered loans charge higher prices in minority neighborhoods, consistent with race-based price discrimination. A number of studies also document price discrimination against minorities in traditional banking and mortgage lending.

(64) Consumers of covered loans may not understand the terms of and the risks of prolonged indebtedness associated with taking out a covered loan. Studies show that lenders of covered loans often do not comply with information disclosure laws and regulations. There is also evidence that borrowers of covered loans tend to have low financial literacy and be overly optimistic or impatient about their future income.

(65) Research points to a variety of outcomes after consumers take out covered loans, but certain negative outcomes are robust. Access to covered loans can have a negative impact on the readiness and performance of military personnel; and consumers' financial well-being, ability to prioritize other liabilities and responsibilities, and overall health.

Payday Loans Harmful to Consumers?" *Journal of Policy Analysis and Management* 36, no. 1 (2017): 240–48, which uses data from multiple publicly available sources; Charles Romeo, "Estimating the Change in Surplus from the Elimination of Deposit Advance Products" (working paper, Consumer Financial Protection Bureau, 2018), which uses CFPB data; and Adair Morse, "Payday Lenders: Heroes or Villains?" *Journal of Financial Economics* 102, no. 1 (2011): 28–44, which uses data from multiple publicly available sources.

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