Credit Products (Payday Loans, Pawnshops, Tax Refund Anticipation loans, Rent-to- Own Loans and Auto-Title Loans): Effects of Economic and Demographic Differences on Household Demand

Isaiah K. Okiemen

Ph.D. Student in Economics

Howard University, Washington, DC.

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**1. Abstract**

This paper uses data from the 2013 current population survey (CPS) supplement to examine how household demand for credit products (payday loans, pawnshops loans, tax refund anticipation loans, or auto-title loans is related to economic and demographic differences. I also account for the differences in state regulations on these types of credit products based on data available from Pew Charitable trust. In this paper, I used logistic regression model to examine the effects of these economic and demographic characteristics on household’s use. Evidence from the CPS survey shows that there is no statistical relationship between using payday loan and being unbanked. Whereas, this does not appear to be true for pawnshop usage. Same methodology shows that the use of credit product is positively correlated with being unmarried and female headed household. Consumer’s participation in the financial mainstream can improve access to low rate credit products, and may improve savings and economic stability.

**2. Introduction**

The widespread of the alternative financial services (AFS) providers in the United States has motivated the need for research studies as well the need for policy-makers intervention. These alternative financial services, include payday loans, pawn loans, tax refund anticipation loans, rent-to-own loans and auto-title loans. These sources of credits tend to be use by household who had limited or no access to the mainstream lenders due to impaired credit histories or lack of knowledge of the traditional banking products. The annual percentage rate (APRs) on payday loan is usually high, ranging from 391 to 521 percent ($15 to $20 per $100 borrowed for a two-week loan). In this paper, I examine the differences in AFS products and also check for substitutability among the products. Policy concerns regarding these AFS products tend to focus on its demand and supply. The unbanked often must rely on alternative ways to obtain financial products such as pawnshop loan, since they do not have access to mainstream lenders.

**3.0 Review of Literature**

The demand for alternative financial services (AFS) products in the United States poses a huge concern to policymakers. There are quite a few academic research studies that examine the determinants of these credit products, to my understanding there have been little or no concrete studies of how economic and demographic differences affect the household demand for these types of credit products and vice versa. For instance, (Bhutta, Skiba and Tobacman, 2014) research shows that initial payday loan application occur precisely when consumers’ access to liquidity from mainstream creditors is lowest. The alternative financial services (AFS) providers usually have target market, mainly those individuals who do not have access to the traditional bank credit, because they have maxed out existing credit, or simply lack knowledge about products or services provided at the mainstream banks. The demand for AFS products tend to be price inelastic because consumers who are desperate for short-term credits will be more likely to pay any price.

Many researchers have conducted studies on payday lending. For example, in a study conducted using recursive bivariate probit model, Rhine, Greene and Toussaint (2006), evaluated possible linkage between the decision to be unbanked and the use of check cashing for each racial and ethnic groups. Consumers apply for payday loan when they have limited access to mainstream credit generally offered by traditional banks, (Bhutta, Skiba, Tobacman, 2015). For the unbanked immigrants, one of the most prevalent barriers to entering the financial mainstream has been the lack of acceptable identification. The roughly 9.1% of all U.S. families that are without some type of transaction account (unbanked) are disproportionately represented among minorities, Rhine, Greene and Toussaint (2006). These authors found that over 24% of all minority families are unbanked, whereas the comparable figure for Whites is roughly 5%. Unbanked consumers are more likely to reside in low income to moderate income neighborhoods, to have lower income and net worth, and to be less educated, younger, female, unmarried, or unemployed. As Caskey (2002) study shows, many of the unbanked live from paycheck to paycheck. Many have been forced by past personal financial crisis to miss scheduled payment obligations, such as rent, debt service, or utility payments. Caskey argued that problems in their credit histories and debt-service burdens leave a large share of the unbanked, and a significant share of low-income households, generally, cut off from mainstream credit. Payday borrowers are not destitute, as very poor individuals generally fail to meet the bank account ownership and employment of lenders (Brian, T. Meltzer, 2011). Similar studies shows that payday lenders mostly target elderly, young adults, immigrants and lower income communities, Kurban and Diagne (2014). The likelihood of using payday loans is notably higher for households where: the householder rents, is black or native American, is unemployed, is married but divorced or separated, has a high school diploma or some college; or is a single female headed household. Whereas, the likelihood of using payday loan is notably lower for households where the householder has a college degree or is foreign born, (Robert B. Avery, 2011).

**3.1 Payday loan**

Payday loans are short term cash loans based on the borrower’s personal check held for the future deposit or on electronic access to the borrower’s bank account. Borrowers write a personal check for the amount borrowed plus the finance charges and receive cash. In some cases, borrowers sign over electronic access to their bank account to receive and repay the loans. Payday loans range in size from $100 to $1,000, depending on state legal maximums. The average loan term is about two weeks. All a consumer need to get a payday loan is an open bank account in relatively good standing, a steady source of income, and identification. Lenders do not conduct a full credit check or ask questions to determine if a borrower can afford to repay the loan.[[1]](#footnote-1)

The cost of the loan (finance charge) may range from $10 to $30 for every $100 borrowed. A typical two-week payday loan with a $15 per $100 borrowed fee equates to an annual percentage rate (APR) of almost 400%. Variations often reflect the differences in state law setting the maximum allowable fees.[[2]](#footnote-2)

**3.2 Legal Status of Payday Lending**

High cost payday lending is authorized by state laws or regulations in thirty-two states. Eighteen states and the District of Columbia protect their borrowers with reasonable small loan rate caps. Lenders use a variety of tactics to avoid state regulations. Some lenders use sham transactions, such as contracts for Internet access with rebate schemes, to cloak loans.[[3]](#footnote-3)

The PEW charitable trust, classified payday state laws type into three: “First, restrictive states either do not permit payday lending or have price caps low enough to eliminate payday lending in the state. This rate cap is often 36 percent Annual Percentage Rate (APR). Generally, payday loan storefronts are not found in these states. This category includes states where deferred presentment transactions (post-dated checks) are not authorized, are not specifically exempted from general state laws on usury, or are explicitly prohibited by state statute. Twenty-nine percent of Americans live in the 14 states and the District of Columbia that have a Restrictive payday loan regulatory structure. Second, hybrid states have relatively more exacting requirements, with at least one of the following three forms of regulation: (1) rate caps, usually around 10 percent of the borrowed principal, which are lower than most states but still permit loans to be issued with triple-digit APRs; (2) restrictions on the number of loans per borrower, such as a maximum of eight loans per borrower per year; or (3) allowing borrowers multiple pay periods to repay loans. Storefronts that offer payday loans exist in substantial numbers in these states, though the market may be more consolidated and per-store loan volume may be higher here than in less restrictive states. Sixteen percent of Americans live in the eight Hybrid states. Third, Permissive states are the least regulated and allow initial fees of 15 percent of the borrowed principal or higher. Most of these states have some regulations, but allow for payday loans due in full on a borrower’s next payday with APRs usually in the range of 391 to 521 percent ($15 to $20 per $100 borrowed for a two-week loan). Payday loan storefronts are readily available to borrowers located in these states.[[4]](#footnote-4)”

**3.2. Pawnshop Loans**

According to NPA “Pawnbrokers help families through challenging economic times by providing non-recourse, short-term, collateral-based loans that have no effect on a consumer’s credit history. As evidenced by the relatively low national average loan amount of $150, pawn customers only borrow what they need. Furthermore, pawn customers repay their loans and redeem their collateral at a high average national redemption rate of 85 percent. Pawn customers tend to be more disciplined in their borrowing than consumers using other forms of credit. Pawn loans do not cause consumers to overextend their use of credit and, because they are non-recourse, are not factors in filings for bankruptcy protection.[[5]](#footnote-5)” To obtain pawn loan, customers are required to present government issued identification and collateral. If the customer is unable to pay back the loan borrowed, pawnshop brokers have the option of selling the collaterized item, in many cases more than the value of the original loan in order to maximize profit.

Similar to payday lending, the pawnshop industry is subject to federal and state regulations, including the Truth in Lending Act, GrammLeach-Bliley Act, Service members Civil Relief Act, and the USA PATRIOT Act. The Truth in Lending Act (TILA) protects customers against inaccurate and unfair credit billing and credit card practices. It requires lenders to provide customers with loan cost information so that they can comparison shop for certain types of loans. For loans covered under TILA, customers have a right of rescission, which allows three days to reconsider decision and back out of the loan process without losing any money. This right helps protect customers against high-pressure sales tactics used by unscrupulous lenders.[[6]](#footnote-6)

**3.3. Tax Refund Anticipation Loans**

Tax refund anticipation loans are extremely high-cost bank loans secured by the taxpayer’s expected refund. This type of loan is mostly used by consumers of low and moderate income. RALs are aggressively marketed by income-tax preparation companies, such as H&R Block, Liberty Tax, Jackson Hewitt.[[7]](#footnote-7) These tax preparation companies do not lend money directly to consumers, but rather facilitate the RAL applications through banks. These companies often advertise this product as instant cash for consumers who are desperate in need of money to meet short-term financial obligations, such as rent payment, utilities. RAL not only help consumer with short-term financial needs, but also expose them to unpaid debt in the event that they have problems getting their tax refund in a timely manner.

In the 2012 Consumer federation of America and the National Consumer Law Center report, found that “the price for a typical RAL (from Republic Bank & Trust) for a loan of $1,500 is $61.22, plus another $29.95 for a refund anticipation check for the remainder of the consumer’s refund.  The $61.22 fee translates into an APR of 149%.” In the wake of these abusive practices, the Consumer Financial Protection Bureau (CFPB) is embarking on an ongoing effort to protect consumers who are vulnerable to these products.

**3.4. Rent-to-own Loans**

Rent-to-own loan is basically a form of lease options for consumers who do not have immediate cash or credit to purchase household goods such as television, computer, furniture, etc. The rent-to-own companies usually require borrowers deposit a small down payment of the merchandize borrowed and sign contract document to pay back the remaining balance either on a bi-weekly or monthly basis.

According to survey conducted by the Federal Trade Commission (FTC) between 1998 and 1999, over 12,000 randomly selected U.S. households, found that 2.3 percent of U.S. households had used rent-to-own transactions in the last year, and 4.9 percent had done so in the last five years. Compared to households who had not used rent-to-own transactions, rent-to-own customers were more likely to be African American, younger, less educated, have lower incomes, have children in the household, rent their residence, live in the South, and live in non-suburban areas. Thirty-one percent of rent-to-own customers were African American, 79 percent were 18 to 44 years old, 73 percent had a high school education or less, 59 percent had household incomes less than $25,000, 67 percent had children living in the household, 62 percent rented their residence, 53 percent lived in the South, and 68 percent lived in non-suburban areas. Seventy percent of rent-to-own merchandise was purchased by the customer. The purchase rate was consistently high (at least 60 percent) across most demographic groups. Purchases also were widespread across most customers, with 70 percent of customers purchasing at least one item of merchandise.[[8]](#footnote-8)

**3.5. Automobile-Title-Loans**

Auto title is a short-term loan secured by borrower’s title to a vehicle. Borrowers of this type of loan usually experience chronic financial distress. State laws typically determine the terms of the law, maximum loan amount and repossession of the vehicle in the case of default. In many cases, the borrower gives a spare key of the vehicle to the lender or allow the lender to install some sort of tracking device on the vehicle, which facilitates easy tracking and recovery in the event the borrower default payment. According to the Consumer Federation of America (CFA), 17 states permit auto title loans at a higher APRs, whereas the remaining states restrict auto title loans.

Automobile title lenders usually do not require applicants to have clean credit history. They typically require the applicants to provide proof of income (such as paystubs), bank statements for 30 days, the vehicle information including insurance, proof of residence which is usually utility bills that has the applicant’s name.

Based on PEW Charitable Trust assessment of the automobile title loan industry, most title loans are structured as balloon-payment, also known as lump-sum payment, loans, as described above; some states also allow or require title loans to be repayable in installments. When the loan comes due, borrowers who cannot afford to repay can renew it for a fee. As with payday loans, payments exceed most title loan borrowers’ ability to repay so the large majority of loans in this market are renewals, rather than new extensions of credit.[[9]](#footnote-9)

**4.0. Research Methodology**

From a consumer choice theoretical framework, I model the consumer’s choice of whether to use AFS products with a multivariate logit model. The logit model is more appropriate in this case given that the dependent and predictor variables are categorical in nature. In this paper, I examine how the use of AFS products is related to household economic and demographic characteristics. These variables are of particular interest in that they support research topic and question in this paper.

Three equations are presented. First is payday loan usage. Second, is pawnshop loan usage and third, is auto title loan usage. The hypothesis in the model is that household economic and demographic differences have ***no effect*** on the use of AFS credit products. Note that rejecting the null hypothesis would mean the coefficients of each predictor variables in the model are statistically different from, hence household economic and demographic differences have effect on household use of AFS products. Let denote the dependent variable payday loan, is equal to 1 if the household uses payday loan in the last 12 months, otherwise 0. The variable, equals 1 if the household uses pawnshop loans in the last 12 months, otherwise 0. The variable, equals 1 if the household uses auto title loans in the last 12 months, otherwise 0. Thus, the nonlinear least-squares estimate of the logistic regression is given as: =

The probability that household uses credit product (that is Y = 1) can be computed as follows:

=

The probability that household does not use high-rate credit product (that is Y = 0) can be computed as follows:

The variables in X(s) may be different or same for each of the three equations. Each of the variables is assumed to be a nonlinear function of a set of explanatory variables.

**4.1 Wald Hypothesis Testing: Statistical Test for Individual Predictors**

Wald hypothesis testing evaluates the statistical significance of each model and is calculated by taking the ratio of the square of the regression coefficient to the square of the standard error of the coefficient. The idea here is to test the hypothesis that the coefficient of an independent variable in the model is significantly different from zero. If the test fails to reject the null hypothesis, this suggests that removing the variable from the model will not substantially harm the fit of that model. Wald hypothesis test can be stated as follows:

The test shows that the model fits well. The coefficients of the selected predictors in both payday loan, pawn loan and automobile title loan equations are statistically different from zero. As shown in below tables, the various *P*-values for the test is less than 0.0500, which indicate reject null hypothesis of no relationship.

Wald test for unbanked

in glm(formula = pawnshop ~ femalehh + unbanked + homeowner + age25.34 +

age15.24 + age35.44 + income1 + income2 + income3 + income4 +

age15.24 + age25.34 + age35.44 + age45.54 + age55.64 + black +

hispanic, family = "binomial", data = hh2013)

F = 173.1607 on 1 and 53390 df: p= < 2.22e-16

**5.0. Data and Sample Description**

Data sources: “In June 2013, the FDIC sponsored the third National Survey of Unbanked and Underbanked Households to collect data on the number of U.S households that are unbanked and underbanked, their demographic characteristics, and their reasons for being unbanked and underbanked. The CPS has been conducted monthly for over 50 years. This survey was conducted by the U.S. Census Bureau, with a nationally representative sample of 53,405.” The dataset is cross-sectional. The unit of observation is household. Emphasis is placed on the full sample with special consideration given to Metropolitan statistical area (MSA)-Washington-Arlington-Alexandria, DC-VA-MD-WV. The selected predictive variables in this paper appear to be statistically significant in literature mentioned.

**Table 1. Definition of Selected Variables**

|  |  |
| --- | --- |
| **Variables Names** | **Definitions of Variables** |
| unbanked | indicator variable =1 if do not have checking and or savings account, otherwise 0 |
| Payday | indicator variable =1 if used payday loan the past 12 months, otherwise 0 |
| Pawnshop | indicator variable =1 if used pawnshop loans loan the past 12 months, otherwise 0 |
| Rentto | indicator variable =1 if household uses rent-to-own loans, otherwise 0 |
| Autoti | indicator variable =1 if household uses auto-title loans, otherwise 0 |
| Ral | indicator variable =1 if household uses refund anticipation loans, otherwise 0 |
| Nohighrate | indicator variable =1 if never used high-rate credit (payday, pawn, rent-to-own, ral, auto-tile loan, otherwise 0 |
| Nopayday | indicator variable =1 if never used payday loan, otherwise 0 |
| Nopawnshop | indicator variable =1 if never used pawnshop loans loans, otherwise 0 |
| Norentto | indicator variable =1 if never used rent-to-own loans, otherwise 0 |
| Noautoti | indicator variable =1 if never used auto-title loans, otherwise 0 |
| Noral | indicator variable =1 if never used refund anticipation loans, otherwise 0 |
| Femalehh | indicator variable =1 if unmarried female headed household |
| Homeowner | indicator variable =1 if household own a home, otherwise 0 |
| income1 | indicator variable =1 if household income is less than $15,000 |
| income2 | indicator variable =1 if household income is between $15,000 and $30,000 otherwise 0 |
| income3 | indicator variable =1 if household income is between $30,000 and $50,000 otherwise 0 |
| income4 | indicator variable =1 if household income is between $50,000 and $75,000 otherwise 0 |
| income5 | indicator variable =1 if household income is greater than $75,000 otherwise 0 |
| age15-24 | indicator variable =1 if household age is between 15 and 24 otherwise 0 |
| age25-34 | indicator variable =1 if household age is between 24 and 34 otherwise 0 |
| age35-44 | indicator variable =1 if household age is between 35 and 44 otherwise 0 |
| age45-54 | indicator variable =1 if household age is between 45 and 54 otherwise 0 |
| age55-64 | indicator variable =1 if household age is between 55 and 64 otherwise 0 |
| age65more | indicator variable =1 if household age is between 65 or more otherwise 0 |
| educ1 | indicator variable =1 if household has no highschool degree, otherwise 0 |
| educ2 | indicator variable =1 if household has highschool degree, otherwise 0 |
| educ3 | indicator variable =1 if household has college degree, otherwise 0 |
| Emp | indicator variable =1 if household is employed, otherwise 0 |
| Black | indicator variable =1 if household is black, otherwise 0 |
| White | indicator variable =1 if household is white, otherwise 1 |
| Hispanic | indicator variable =1 if household is Hispanic, otherwise 0 |
| MSA\_DMV | indicator variable =1 if Washington-Arlington-Alexandria, DC-VA-MD-WV , otherwise 0 |

**Table 2. Household Income of Borrowers (Percentage Distribution-National Data)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Income (in thousand) | Payday loan | Pawn loan | Rent-to-Own | Auto-title loan | RAL | No high-rate credit |
| Less than $15 | 17 | 35 | 28 | 21 | 15 | 11 |
| $15-$30 | 27 | 28 | 27 | 22 | 30 | 15 |
| $30-$50 | 27 | 19 | 26 | 24 | 24 | 19 |
| $50-$75 | 18 | 11 | 11 | 18 | 18 | 19 |
| $75 or more | 11 | 7 | 8 | 15 | 13 | 36 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

As the income table shows, households that use pawn loans have incomes less than $15,000 relative to households that do not use high-rate credit. The lowest income do not use payday loan and auto title loan. Plausible explanation could be that they do not have checking account, which many payday lenders requires in order to obtain loan. Lower income households are less likely to use auto-title loans. Relatively high percentage of households that do not use high-rate credit have income $75,000 or more.

**Table 3. Household Income of Borrowers (Percentage Distribution-MSA-DMV)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Income (in thousand) | Payday loan | Pawn loan | Rent-to-Own | Auto-title loan | RAL | No high-rate credit |
| Less than $15 | 0 | 14 | 40 | 0 | 15 | 8 |
| $15-$30 | 17 | 50 | 20 | 25 | 0 | 5 |
| $30-$50 | 33 | 0 | 20 | 0 | 8 | 13 |
| $50-$75 | 8 | 29 | 0 | 25 | 54 | 14 |
| $75 or more | 42 | 7 | 20 | 50 | 23 | 60 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

**Table 4. Household Age of Borrowers (Percentage Distribution-National Data)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Age group | Payday loan | Pawn loan | Rent-to-Own | Auto-title loan | RAL | No high-rate credit |
| 15 to 24 | 6 | 9 | 9 | 6 | 8 | 3 |
| 25 to 34 | 25 | 23 | 27 | 28 | 25 | 14 |
| 35 to 44 | 22 | 21 | 25 | 26 | 27 | 15 |
| 45 to 54 | 25 | 27 | 21 | 22 | 23 | 19 |
| 55 to 64 | 14 | 15 | 12 | 10 | 12 | 20 |
| 65 or more | 8 | 5 | 6 | 8 | 6 | 28 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

Relative to the household that do not use high-rate credit, households that use pawn loans, rent-to-own loans, auto title loans and tax refund anticipation loans disproportionately are in the age range 25 to 54. The lowest age range 15 to 24 do not disproportionately use any of the high-rate credits. Households in age group 15 to 24 are more likely to be dependent children who may not file taxes in order to qualify for tax refund anticipation loans. Households that do not use high-rate credit are 65 years or older, perhaps they have accumulated some sort of savings over the years and could be receiving social security benefits or other retirements benefits.

**Table 5. Household Age of Borrowers (Percentage Distribution-MSA-DMV Level)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Age group | Payday loan | Pawn loan | Rent-to-Own | Auto-title loan | RAL | No high-rate credit |
| 15 to 24 | 5 | 5 | 5 | 5 | 5 | 5 |
| 25 to 34 | 20 | 21 | 20 | 20 | 20 | 19 |
| 35 to 44 | 19 | 20 | 20 | 19 | 20 | 18 |
| 45 to 54 | 19 | 19 | 20 | 20 | 19 | 20 |
| 55 to 64 | 16 | 16 | 16 | 16 | 16 | 16 |
| 65 or more | 20 | 20 | 20 | 20 | 20 | 21 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

**6.0. Empirical Findings**

The *payday* equation shows that being unmarried and female headed household (femalehh) significantly increases the likelihood of using payday loan by 45% points. Household’s net worth as proxied by homeownership provides statistical evidence that being homeowner significantly decreases the chances of using payday loan by 79% points. Homeowner is likely to have some sort of good banking relationship in the mainstream market. Being a homeowner allows household to build assets and savings over time. In many cases, mainstream institutions generally try to cross-sell its products (such as credit cards or home equity line of credit) to customers who maintain solid banking relationship. As the logit regression shows, there appears to be negative relationship between using payday loan and being unbanked. Because payday lenders require checking account get the loan, households are left with the option to consider other credit product, such as pawn loan.

The *pawnshop* loan equation

Automobile title loan

[Discuss findings here]

**Table.6. Logit Regression Results for Households Who Use Payday Loan**

Deviance Residuals:

Min 1Q Median 3Q Max

-0.4630 -0.1923 -0.1374 -0.0940 3.4603

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) -5.84640 0.19406 -30.127 < 2e-16 \*\*\*

femalehh 0.45235 0.08932 5.064 4.10e-07 \*\*\*

unbanked -0.10719 0.13507 -0.794 0.4274

homeowner -0.78800 0.08745 -9.011 < 2e-16 \*\*\*

age25.34 1.24386 0.15829 7.858 3.91e-15 \*\*\*

age15.24 0.81656 0.20841 3.918 8.93e-05 \*\*\*

age35.44 1.21535 0.15940 7.624 2.45e-14 \*\*\*

income1 0.64993 0.15680 4.145 3.40e-05 \*\*\*

income2 1.18842 0.14034 8.468 < 2e-16 \*\*\*

income3 1.09742 0.13661 8.033 9.52e-16 \*\*\*

income4 0.88961 0.14191 6.269 3.63e-10 \*\*\*

age45.54 1.36332 0.15399 8.853 < 2e-16 \*\*\*

age55.64 0.90177 0.16472 5.474 4.39e-08 \*\*\*

black 0.66325 0.09303 7.130 1.01e-12 \*\*\*

hispanic 0.19446 0.11086 1.754 0.0794 .

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 7887.8 on 53404 degrees of freedom

Residual deviance: 7286.9 on 53390 degrees of freedom

AIC: 7316.9

Number of Fisher Scoring iterations: 8

**Table.7. Logit Regression Results for Households Who Use Pawnshop Loan**

Deviance Residuals:

Min 1Q Median 3Q Max

-0.6935 -0.2253 -0.1318 -0.1010 3.8120

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) -6.81354 0.19591 -34.779 < 2e-16 \*\*\*

femalehh 0.39493 0.07406 5.332 9.70e-08 \*\*\*

unbanked 1.07452 0.08166 13.159 < 2e-16 \*\*\*

homeowner -0.33203 0.07338 -4.525 6.05e-06 \*\*\*

age25.34 1.86901 0.15624 11.963 < 2e-16 \*\*\*

age15.24 1.83209 0.17694 10.354 < 2e-16 \*\*\*

age35.44 1.91294 0.15622 12.245 < 2e-16 \*\*\*

income1 1.96937 0.13796 14.275 < 2e-16 \*\*\*

income2 1.87619 0.13517 13.880 < 2e-16 \*\*\*

income3 1.41250 0.13703 10.308 < 2e-16 \*\*\*

income4 0.94500 0.14724 6.418 1.38e-10 \*\*\*

age45.54 2.07234 0.15131 13.696 < 2e-16 \*\*\*

age55.64 1.52633 0.15856 9.626 < 2e-16 \*\*\*

black -0.11921 0.08634 -1.381 0.16739

hispanic -0.24223 0.09400 -2.577 0.00997 \*\*

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 10757.5 on 53404 degrees of freedom

Residual deviance: 9422.2 on 53390 degrees of freedom

AIC: 9452.2

Number of Fisher Scoring iterations: 8

**Table.8. Logit Regression Results for Households Who Use Auto-title Loan**

Deviance Residuals:

Min 1Q Median 3Q Max

-0.2480 -0.1282 -0.0926 -0.0654 3.7634

Coefficients:

Estimate Std. Error z value Pr(>|z|)

(Intercept) -6.95099 0.28874 -24.074 < 2e-16 \*\*\*

femalehh -0.01237 0.15430 -0.080 0.936079

unbanked 0.63166 0.17932 3.523 0.000427 \*\*\*

homeowner -0.12968 0.13249 -0.979 0.327692

age25.34 1.65471 0.23806 6.951 3.64e-12 \*\*\*

age15.24 1.21964 0.31467 3.876 0.000106 \*\*\*

age35.44 1.63112 0.23698 6.883 5.87e-12 \*\*\*

income1 0.89565 0.21649 4.137 3.52e-05 \*\*\*

income2 0.93443 0.20368 4.588 4.48e-06 \*\*\*

income3 0.90802 0.19171 4.736 2.17e-06 \*\*\*

income4 0.64675 0.19977 3.238 0.001206 \*\*

age45.54 1.32232 0.23834 5.548 2.89e-08 \*\*\*

age55.64 0.60335 0.26718 2.258 0.023932 \*

black 0.26353 0.15739 1.674 0.094048 .

hispanic -0.07909 0.17686 -0.447 0.654745

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Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 3862.0 on 53404 degrees of freedom

Residual deviance: 3686.2 on 53390 degrees of freedom

AIC: 3716.2

Number of Fisher Scoring iterations: 9

**7.0. Conclusions and Implications**

Participation in the financial mainstream helps promote economic development, facilitate asset building and wealth accumulation.

*[discuss detail conclusions and policy recommendations here]*

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1. Payday loan consumer information: Consumer Federation of America. http://paydayloaninfo.org/facts#1 [↑](#footnote-ref-1)
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4. Pew Charitable Trust: State Payday Loan Regulations and Usage Rates: http://www.pewtrusts.org/en/multimedia/data-visualizations/2014/state-payday-loan-regulation-and-usage-rates [↑](#footnote-ref-4)
5. [↑](#footnote-ref-5)
6. Office of the Comptroller of the Currency-United Department of Treasury: https://www.occ.gov/topics/consumer-protection/truth-in-lending/index-truth-in-lending.html [↑](#footnote-ref-6)
7. National Consumer Law Center: Refund Anticipation loans and Checks: www.nclc.org/issues/refund-anticipation-loans.html [↑](#footnote-ref-7)
8. Rent-to-own transactions provide immediate access to household goods for a relatively low weekly or monthly payment, typically without any down payment or credit check. Consumers enter into a self-renewing weekly or monthly lease for the rented merchandise, and are under no obligation to continue payments beyond the current weekly or monthly period. The lease provides the option to purchase the goods, either by continuing to pay rent for a specified period of time, usually 12 to 24 months, or by early payment of some specified proportion of the remaining lease payments. These terms are attractive to many consumers who cannot afford a cash purchase, may be unable to qualify for credit, and are unwilling or unable to wait until they can save for a purchase. Some consumers also may value the flexibility offered by the transaction, which allows return of the merchandise at any time without obligation for further payments or negative impact on the customer's credit rating. Other consumers may rent merchandise to fill a temporary need or to try a product before buying it. The rent-to-own industry trade association estimated that in 1998 there were 7,500 rent-to-own stores in the United States, serving nearly three million customers, and producing $4.4 billion in revenues.

   Federal Trade Commission: Survey of Rent-Own Customers: https://www.ftc.gov/reports/survey-rent-own-customers [↑](#footnote-ref-8)
9. Auto Title Loans: Market Practices and Borrowers’ Experiences: Title loan customers spend approximately $3 billion annually, or about $1,200 each, in fees for loans that average $1,000.14 The annual interest rates for title loans are typically 300 percent annual percentage rate (APR), but lenders charge less in states that require lower rates.15 2. The average lump-sum title loan payment consumes 50 percent of an average borrower’s gross monthly income, far more than most borrowers can afford.16 By comparison, a typical payday loan payment takes 36 percent of the borrower’s paycheck.17 3. Between 6 and 11 percent of title loan customers have a car repossessed annually. One-third of all title loan borrowers do not have another working vehicle in their households. 4. Only one-quarter of borrowers use title loans for an unexpected expense; half report using them to pay regular bills. More than 9 in 10 title loans are taken out for personal reasons; just 3 percent are for a business the borrower owns or operates. 5. Title loan borrowers overwhelmingly favor regulation mandating that they be allowed to repay the loans in affordable installments.

   http://www.pewtrusts.org/~/media/assets/2015/03/autotitleloansreport.pdf [↑](#footnote-ref-9)