

# **Racial/Ethnic Differences on Payday Loan Delinquency Rate: Evidence from 2007 and 2010 Survey of Consumer Finances (SCF)**

**Okechukwu D. Anyamele<sup>1</sup>**

## **Abstract**

This study examined the differences in household payday loan delinquency rates of the racial/ethnic groups. The study uses combined data from 2007 and 2010 surveys of consumer finances(SCF). The study found that payday loan borrowers are more likely to be delinquent than non-payday loan borrowers. 11.84% of payday loan borrowers were delinquent compared with 2.28% for non-payday loan borrowers over the same period. Also, Payday loan borrowers are more likely to have missed a payment in the last 12 months. 8.3% of payday loan borrowers reported missing a payment in the last 12 months compared with 1.8% of non-payday loan borrowers who missed a payment over the past 12 months. The study found that African Americans and Hispanics have higher payday loan participation rate than whites and Asians over the study period.

**JEL Classifications:** D12, D14, G00, J15

**Keywords:** Payday loan, Loan Delinquency Rates, Racial/Ethnic Groups, Survey of Consumer Finances, and Logistic Regression.

## **1 Introduction**

There is a misconception about the composition of payday loan borrowers in United States. However, the available data suggest that payday loan borrowers cut across different ethnic and income groups. The combined 2007 and 2010 survey of consumer finances (SCF) data showed that 2.85% of the sample size is made up of payday loan borrowers. In 2007, only 1.7% of the surveyed households were payday loan borrowers. This number increased to 3.6 % in the 2010 sample. This represents a very significant increase between the two survey periods, an increase of 111.8%.

---

<sup>1</sup>College of Business, Jackson State University, USA.

The largest payday loan borrowers by income category are households that earn between \$20,601 and \$36,500. The next group is the households that earn less than \$20,600. Overall, households with less income are more likely to participate in payday loans than households with higher income. Among the different racial groups, with the exception of the less than \$20,600 income category where Asians and whites participated more, African Americans have a higher payday loan participation rate in all income categories. This pattern is also evident with the age categories.

Asians recorded the highest increase in their payday loan borrowing participation rate between 2007 and 2010. Their participation in payday loans increased from 1.1% in 2007 to 4.1% in 2010, an increase of 272.7%. The payday loan participation rate of African Americans between 2007 and 2010 was consistent with the overall increase of all the races of 112% from 4.2% in 2007 to 8.9% in 2010. The white households saw an increase of 108% between 2007 and 2010. Their participation rate in payday loan increased from 1.3% in 2007 to 2.7% in 2010. Hispanic households recorded the least payday loan participation rate increase between 2007 and 2010. Between the two surveys, their payday loan participation rate only increased from 3.2% in 2007 to 3.9%, an increase of 21.9%.

What has not been appropriately documented is the delinquency rate of payday loan borrowers. Some of the studies have only settled at descriptive nature of the payday loan borrowers. The purpose of this study is to document the delinquency rate of payday loan borrowers among the different racial/ethnic groups in U.S. To accomplish this task we use the 2007 and 2010 data from (SCF). The delinquency rate is based on SCF response about whether one has any late payment over 60 days during the past twelve months. Yes=1 if the household has any late payment over 60 days, otherwise, No=0.

The Federal Reserve Board survey of consumer finances, which is conducted triennially, is the source of our data. This is cross-sectional data that is comprehensive in questions that it asks consumers. The SCF data has tended to oversample wealthy households, thus it applies multiple imputations to many variables to correct for missing values. This method has a tendency of biasing the standard errors in a regression. SCF has provided the procedure for correcting this bias during estimation. None of the past studies have examined the effect on their likelihood of default of households that borrowed from payday lenders. This question was first introduced in the 2007 survey of consumer finances (SCF). This study will attempt to find the impact of payday lenders on households' default rates. The 2007 question on "payday" loans is worded differently from the 2010 question, and thus, could be a source of confusion for consumers. This is evident from the 2010 wording of the question. The consumers were asked in 2007, during the past year, have you (or anyone in your family living here) borrowed money that was supposed to be repaid in full out of your next paycheck? In 2010, the question was improved upon: During the past year, have you (or anyone in your family living here) taken out a "payday loan," that is, borrowed money that was supposed to be repaid in full out of your next paycheck? Specifically, payday loan is mentioned in 2010 and not mentioned in 2007.

## **2 Literature Review**

Canner and Lucket (1991)[1] found that married households were less likely to have repayment problem than divorced or separated households. The delinquency rate of younger households is expected to be higher than the delinquency rate of older

households. This can be explained from the fact that older households in general have more wealth and financial assets that can act as buffer in unforeseen changes in their economic and financial conditions than younger households.

Although previous studies have concluded that households headed by minorities and women were more likely to experience difficulties in loan repayment, none had studied the rate at which payday loan affect the delinquency rates of these households. This study is an attempt to address this question. Cox and Jappelli (1993)[2] concluded that credit constraint could affect leveraged purchases of durables and housing. Their study found that removing credit constraints would increase overall household liabilities by 9 percent. Calem and Mester (1995)[3] used the variable credit application turned down as an indicator of a household that is credit constrained. However, their study did not examine why these households were credit constrained. Canner and Lucket (1991)[1] found the probability of loan delinquency to be inversely related to the age and liquid asset holdings of a household. Their study also concludes that loan delinquency is more likely for unemployed households, separated or divorced households with many children and households headed by a minority individual. These studies did not account for the fact that these households that are unemployed might have experienced negative income shock from loss of employment income. This study accounts for the impact of unexpected effect of financial shocks and other unexpected events on loan delinquency. Getter (2003)[4] investigated the impact of unanticipated economic shocks that reduce wealth or disrupts the income stream or if excessive spending causes households to become financially overextended. His study focused on 1998 SCF data.

Getter (2003)[4] found that delinquency risk is more likely to increase as a result of unanticipated shocks to household wealth and unexpected loss of income. The study further concludes that size of the monthly household payment burden is not significantly related to rising delinquency risk. This study extends Getter (2003)[4] by examining the effect with 2007 through 2010 SCF data, thus contributes to the debate on household delinquency in the recent period. Straight (2001)[5] concludes that there is a large disparity in the net worth of black and white families with black families having about 12% of the net worth of white families. Anderson and Vanderhoff (1999)[6] conclude that black households have higher marginal default rates than other racial groups. Coulibaly and Li (2009)[7] found some evidence that households that are more financially constrained are more likely to prefer adjustable rate mortgage ARMs. Their study found no evidence that standard demographic variables such as race, family size or marital status play a role in mortgage choice.

Johnson and Li (2010)[8] concluded that debt service ratio DSR was a good proxy to determine households that are borrowing constrained. They found that a household with a DSR in the top two quintiles of the distribution above or about 20% has a likelihood of being turned down for credit in the past 5 years. They also conclude that having access to credit in the past for the household in the top quintile, if they have a DSR above or about 30%, will likely be turned down for credit that is 8 percentage points higher than it is for a household without any debt at all. Johnson and Li (2011)[9] found that households with adjustable rate mortgage ARM were not more likely to be borrowing constrained than households with fixed rate mortgage FRM. They also concluded that using a low asset-to-income ratio as a measure of liquidity constrains that ARM borrowers do not appear more liquidity constrained than other borrowers. However, they found that households with ARM have been turned down for credit in the past five years, hardly ever pay off their credit cards, and utilize a higher share of their credit limits.

While the literature points to minorities having difficulties in their loan repayment or higher proportion of loan delinquency, after controlling for demographic and financial characteristics, we posit that payday loans, higher liquidity constraint or borrowing constraint has more significant impact on loan delinquency rate on households than race. Logan and Weller (2009) [10] found that payday loan borrowers have less income, lower wealth, fewer assets, and less debt than non-payday loan borrowers. They concluded that payday loan borrowers were more likely to be minorities and single women than non-payday loan borrowers. Their study was one of the first studies to use the survey of consumer finances to study the characteristics of payday loan borrowers. Morgan (2007)[11] found delinquency rates were not higher for predatory lenders surveyed in 2001, even those living in states with higher or unlimited payday limits. On the contrary, risky households (with certain income) surveyed in 2001 were 9% less likely to have missed a payment if their state allowed unlimited payday loans. These findings suggest that riskier, less educated households and smokers were less likely to be turned down for credit if their state allowed unlimited or larger payday loans. These findings are contrary to the findings of Logan and Weller (2009)[10].

### 3 Theoretical Framework

The decision to default is a rational one by the borrower based on comparison of the financial costs and returns involved in continuing or discontinuing the periodic payments on their loans (Jackson and Kasserman, 1980)[12]. The fundamental argument of whether equity or income is the basis for household decision to default has largely favored the equity theory proposition. We saw this in the housing sector loans following the 2008 financial crisis that saw some homeowners opt for default because their equity value has become negative. Here we posit that households are more likely to be delinquent the higher the DSR and FOR. It is equally important to note that households that are credit constrained may be more likely to delinquent with their loans than the ones that are not. There is no clear definition in terms of what constitutes a default or a delinquent loan. Some studies have argued that a loan is in default if the terms of the loan are not met. Others have used the 30 days failure to make payment, while others have used 60 days and some have equally used 90 days as a benchmark for loan default. See (Avery, Calem, and Canner, 2004; Clauretje and Sirmens, 2003)[13, 14] for details on default. The model is a measure of the probability of a household to be delinquent after obtaining a loan. This model is a variant from Greene's (1998)[15] study.

$$Y_{it} = \beta X_{it} + \mu_{it} \quad (1)$$

$Y_{it}$  is a binary variable that takes the value of 1 or 0. If the  $i$ th household is behind by 60 days over the last 12 months,  $Y_{it}$  is 1; otherwise, it is 0.  $X$  is a vector of independent variables, and  $\beta$  is the vector of coefficients to be estimated, while  $\mu$  is the error term. The independent variables consist of demographic variables, financial buffers, adverse financial and economic events, household debt burden, and credit constraint. Thus, we can write the delinquency equation as follows:

$$\text{Delinquency} = f(\text{DM, FB, EFA, DB, CC}) \quad (2)$$

The logistic equation to be estimated is expressed as:

$$\text{Prob (Delinquency)} = \beta + \alpha \text{DM} + \phi \text{FB} + \gamma \text{EFA} + \pi \text{DB} + \lambda \text{CC} + \mu \quad (3)$$

Where  $\beta$  is a constant and  $\alpha$  is the coefficient of demographic variables,  $\phi$  is the coefficient of financial buffers,  $\gamma$  is the coefficient of economic and financial adverse events,  $\pi$  is the coefficient of debt burden,  $\lambda$  is the coefficient of credit constraint and  $\mu$  is the error term.

#### 4 Descriptive Statistics

The 2010 SCF survey showed that white households constitute 73.42% of the sample size and accounted for 61.56% of the delinquency rate in 2010. The delinquency rate for white households in 2010 is 6.10%. It is also worth knowing that African American households accounted for 12.19% of the sample size but had a delinquency rate of 12.70% in 2010. Hispanic households represented 9.86% of the sample size but had a delinquency rate of 10.42% in 2010. Asian and others households make up 4.53% of the sample size and had a delinquency rate of 4.84% in 2010. Table 1 shows that loan delinquency rate increased for all races. Between 2007 and 2010, loan delinquency rose by 74.34%. African American and Hispanic households had their loan delinquency rates increased by 50.65% and 69.98% respectively from 2007 to 2010. Between the 2007 and 2010 survey period, the loan delinquency rate increased for white households. For white households, the loan delinquency rate increased by 68.51%. Asian and others households saw an increase in their loan delinquency rate by 167.40% between 2007 and 2010. This was the largest increase among all the races and indicative of the financial crisis of the period. Both the 2007 and 2010 SCF data included a question on the use of payday loans by households: "During the past year, have you (or anyone in your family living here) borrowed money that was supposed to be repaid in full out of your next pay check? Yes=1 and No=5." Of the 4,417 sample size in 2007, 75 participated in payday loans. This represents only about 1.7 percent. However, of the 184 households that reported being delinquent on their loans, 17 participated in payday loans. This represents about 9.24% of the delinquent loans. In 2010, the rate of payday loan participation increased from the 1.7% rate of 2007 to 3.6% in 2010, an increase of 111.8%. Of the 6,482 sample size in 2010, 236 or 3.6% participated in payday loans. White households accounted for 133 or 56.27%, African American households accounted for 70 or 29.75%, Hispanic households accounted for 25 or 10.59% while Asian and others households accounted for 5.08%.

Among white households that were delinquent, 10.25% participated in payday loans in 2010. However, this rate was 7.35% in 2007. This represents an increase of 39.46%. For African American households that participated in payday loans, 6.30% were delinquent in 2010. The delinquency rate was only 3.46 percent for African Americans who participated in payday loans in 2007. Hispanic households that participated in payday loans in 2010 accounted for 6.38% of the delinquency rate. In 2007 this rate increased from a 3.69% delinquency rate. Participating in payday loans increased for all races in 2010 from the 2007 loan delinquency rate. While African American and Hispanic household participation in payday loans increased from 2007 to 2010, the delinquency rate increased by 82% and 73% respectively. Participation in payday loans increased for white

households by 39.46% over the same period. Overall, 74.71% of all households held credit card debt between 2007 and 2010. Among whites, 81.48% had credit card debt, 45.08%, 49.79% and 81.53% of African Americans, Hispanics, and Asian households had credit card debt respectively.

Table 2 shows the delinquency rate on different types of loans. The overall household delinquency rate on credit cards is 3.43% between 2007 and 2010. However, for whites, the rate is 2.98% and 7.39%, 5.70%, and 2.76% for African Americans, Hispanics, and Asians respectively. African Americans are 2.48 times and 2.68 times more likely than whites and Asians respectively to be delinquent on their credit cards and 1.3 times more likely than Hispanics to be delinquent on their credit card loans. Hispanics are 2 times more likely to be delinquent on their credit card loans than whites and Asians.

From table 2, we see that for all households, the mortgage delinquency rate is 5.80%. When we examine the rates for the different races, we see that white households' mortgage delinquency rate stood at 4.72% while African Americans, Hispanics, and Asian mortgage delinquency rates were 16.04%, 8.52%, and 5.53% respectively. African Americans and Hispanics are 3.4 times and 1.8 times more likely than whites to be delinquent on their mortgage loans respectively. African Americans are 1.9 times more likely to be delinquent on their mortgage loans than Hispanics. African Americans and Hispanics are 2.9 times and 1.5 times more likely than Asians to be delinquent on their mortgage loans respectively. On car loans, African Americans are 2.1 times more likely than whites to be delinquent. The delinquency rate for whites is 7.16% and 15.37% for African Americans and 12.44% for Hispanics. Further examination of table 2 shows that African Americans who have adjustable rate mortgage loans have a delinquency rate of 38.89% compared with Hispanics whose delinquency rate on adjustable rate mortgage loans stood at 14.58%. The adjustable rate mortgage loans delinquency rate for whites and Asians are 5.77% and 3.13% respectively. The overall delinquency rate for households with adjustable rate mortgage loans is 7.99%. This rate is 1.4 times higher than the overall mortgage loan delinquency rate.

Table 2 shows the delinquency rates of the different races with college education. Overall, the delinquency rate for those with college degree is 3.29% compared with 8.35% for those without college degree. Overall, delinquency rate and age are inversely related. This is consistent with both permanent income and the life cycle hypothesis. While the delinquency rates are higher for African Americans and Hispanics, they, however, follow the same pattern as whites. From all the tables, we see that the delinquency rate for African Americans is higher at every level of income, education, and loan type. Obviously, the evidence points to some unexplained factors that will cause the delinquency rate for African Americans with the same level of education or income to be higher than that of other racial or ethnic groups. As noted by Kau et al. (2012)<sup>[16]</sup> lenders do not behave as competitive markets would predict, rather they charge higher contract rates to black neighborhoods than could be justified in a competitive market. The data for payday loan covered the 2007-2010 SCF surveys. The data gives insight into the borrowing differences of the different racial groups or their use of payday loans during the recent financial crisis. Morgan (2007)[11] included the payday loan as a predictor variable on delinquency rate. The data is different from the one used by Logan and Weller (2009)[10].

Table 3 show that there is not much difference between those with college degree and those without college degrees who participate in payday loans. The rate of payday loan participants for those with no college degree is 4.3%. This rate is slightly lower than those

with college degrees who have a participation rate of 4.5%. The participation rate for those with more than a college degree is less than one percent, only .7%. To put this in the context of the financial crisis, with the exception of African American households that experienced a 5.8% participation rate, the impact of the financial crisis did not significantly affect those with more than a college degree for level of education. Table 3 also shows that payday loan borrowers are more likely to be delinquent than non-payday loan borrowers. 11.84% of payday loan borrowers were delinquent compared with 2.28% for non-payday loan borrowers over the same period. This difference is highly significant and supports the findings of Logan and Weller (2009)[10].

Payday loan borrowers are more likely to have missed a payment in the last 12 months. 8.3% of payday loan borrowers reported missing a payment in the last 12 months compared with 1.8% of non-payday loan borrowers who missed a payment over the past 12 months. When viewed from the marital status, households that are headed by separated, divorced, and never married persons have the highest payday loan participation rate. The payday participation rates are 6%, 5%, and 4.9% respectively. Asians and whites have the highest payday loan borrowers' participation rate among the separated category with participation rates of 16.4% and 7.6 % respectively. African Americans and Hispanics had the least payday loan participation rate in the separated category with participation rates of 2.7% and 3.6% respectively. Among the never married category, African Americans and Hispanics have the highest payday loan participation rate while Asians and whites had the least payday loan participation rate.

Table 5 is the descriptive statistics of what payday loan borrowers used the loan on. The major use for payday loans from table 5 shows that emergency, convenient, pay other loans, and the only option where the major uses in this listed order respectively for payday loans. Similarly, the use of payday loans for these purposes all increased between 2007 and 2010 survey periods. The use of payday loans for food, gas, rent, utilities and Christmas all decreased between 2007 and 2010. Overall, 2.11% or (175/8282) of whites participated in payday loans. 7.27% or (87/1197) of African Americans participated in payday loans while 3.68% or (35/952) Hispanics borrowed through payday loans. The participation rate of Asians in payday loans is 2.98% or (14/470). It is obvious from table 5 that payday loan borrowers do not resort to payday loans only because they are delinquent on their loans. Rather, some use it to avoid being delinquent on their loans while others use it because of its convenience as opposed to other loans where documentation on several assets and income are required before approval.

## **5 Estimation Results**

To fully examine the impact of the financial crisis on the household delinquency rate, we pooled the 2007 and 2010 SCF data into one. The purpose was to examine the impact of payday loans on the household delinquency rate. However, there are some interesting insights from the 2007 and 2010 SCF regression results of table 6. Table 6 shows that unemployed households are more likely to be delinquent than employed households. Households that are credit constrained and have high debt service ratios have a higher probability of being delinquent on their loans. Having a college degree was not significant in reducing the probability of being delinquent for whites, African Americans, but increases the likelihood of delinquency for Hispanics. Households with savings are less likely to be delinquent on their loans. While this is not significant for African

Americans and Hispanics, the coefficient has the expected sign. Also, having adjustable rate mortgage loans significantly increases the likelihood of delinquency for whites and African Americans but not for Hispanics. This result may be interpreted as evident that the impact of subprime loans did not become more pronounced in African American households until the financial crisis was set forth. Having stock market account was only significant for white households in reducing the probability of delinquency although it has the expected sign for African Americans. Life insurance while not significant had the correct sign. With the exception of Hispanic households, Poor health and payday loan increases the probability of loan delinquency for whites and African Americans. Payday loan borrowers are more likely to be delinquent with their loans than non-payday loan borrowers and the result is highly significant. Age and age squared showed the expected results for all races, but were highly significant for whites and African Americans, but not for Hispanics. This result is consistent with both permanent income and the life cycle hypothesis. The year variable represents the environment and shows that delinquency increased over the financial crisis. These results are consistent with the descriptive statistics on table 3 and lend credence to the findings of Rugh and Massey (2010)[17].

## 6 Conclusion and Policy Implications

This paper has investigated the differences in payday loan delinquency rate among the racial/ethnic groups. The study combined data from two SCF survey years to ensure that results obtained are robust. The study separated the racial/ethnic groups of whites, African Americans, Hispanics, and Asians. Previous studies combined African Americans and Hispanics into one group. See (Getter 2003; Godwin 1999; Canner and Luckett, 1991)[4,18,1]. By separating the two ethnic minorities, we are able to tease out the differences among them that were overlooked by previous studies. The study found that African Americans and Hispanics have the highest payday loan delinquency rate over the study period. Whites and Asians have the least payday loan delinquency rate over the study period. Payday loan increases the probability of delinquency for all races. These findings are similar to Logan and Weller (2009)[10]. The findings of this research calls to the need for more financial education on debt management in African American households than other racial/ethnic groups. Despite having the lowest debt holdings during this period, African Americans are more likely to be delinquent with their loans than whites, Hispanics, and Asians. This finding is similar to Weller (2009)[19]. This calls for adequate monitoring of the loan patterns of financial institutions and the charges or the costs of loans assessed to African Americans.

## References

- [1] Canner, G.B., & Luckett, C.A. (1991). Payment of Household Debts. *Federal Reserve Bulletin*, 77, 218-229.
- [2] Cox, D., & Jappelli, T. (1993). The Effect of Borrowing Constraints on Consumer Liabilities. *Journal of Money, Credit, and Banking*, 25(2), 197-214.
- [3] Calem, P.S., & Mester, L.A. (1995). Consumer Behavior and the Stickiness of Credit-Card Interest Rate. *American Economic Review*, 85(5), 1327-1336.



- [4] Getter, D.E. (2003). Contributing to the Delinquency of Borrowers. *Journal of Consumer Affairs*, 37(1), 86-100.
- [5] Straight, R.L. (2001). Survey of Consumer Finances: Asset Accumulation Differences by Race. *Review of Black Political Economy*. 67-81.
- [6] Anderson, R., & Vanderhoff, J. (1999). Mortgage Default Rates and Borrower Race. *Journal of Real Estate Research*, 18(2-3), 279-289.
- [7] Coulibaly, B., & Li, G. (2009). Choice of Mortgage Contracts: Evidence from the Survey of Consumer Finances. *Real Estate Economics*, 37(4), 659-673.
- [8] Johnson, K., & Li, G. (2010). The Debt Payment to Income Ratio as an Indicator of Borrowing Constraints: Evidence from Two Household Surveys. *Journal of Money Credit and Banking*, 42, 1373-1390.
- [9] Johnson, K., & Li, G. (2011). Are Adjustable-Rate Mortgage Borrowers Borrowing Constrained? FEEDS Working Papers, 2011-21
- [10] Logan, A., & Weller, C.E. (2009). Who Borrows From Payday Lenders? An Analysis of Newly Available Data, Center for American Progress. [www.Americanprogress.org](http://www.Americanprogress.org). Accessed March 4, 2014.
- [11] Morgan, D.P. (2007). Defining and Detecting Predatory Lending. Staff Reports, no. 273, Federal Reserve Bank of New York.
- [12] Jackson, J.R., Kasperman, D.L. (1980). Default Risk on Home Mortgage Loans: A Test of Competing Hypotheses. *The Journal of Risk and Insurance*, 47(4), 678-690.
- [13] Avery, R.B., Calem, P.S., & Canner, G.B. (2004). Credit Information Reporting and Practical Implications of Inaccurate or Missing Information in Underwriting Decisions. Joint Center for Housing Studies, Working Paper Series, BABC 04-11
- [14] Clauretie, T.M., & Sirmans, G.S. (2002). *Real Estate Finance: Theory and Practice*, South-Western Publishers.
- [15] Greene, W.H. (1998). Sample selection in credit-scoring models. *Japan and World Economy*, 10, 299-316.
- [16] Kau, J.B., Keenan, D.C., & Munneke, H.J. (2012). Racial Discrimination and Mortgage Lending. *Journal of Real Estate Finance and Economics*, 45, 289-304.
- [17] Rugh, J.S., and Massey, D.S. (2010). Racial Segregation and the American Foreclosure Crisis. *American Sociological Review*, 75(5), 629-651.
- [18] Godwin, D.D. (1999). Predictors of Households' Debt Repayment Difficulties. *The Journal of the Association for Financial Counseling and Planning Education*, 10(1), 67-78.
- [19] Weller, C.E. (2009). Credit Access, the Cost of Credit and Credit Market Discrimination. *Review of Black Political Economy*, 36, 7-28.

## Appendix

Table 1: Number of Delinquent Households in the Racial/Ethnic Groups

Survey Year	White	African American	Hispanic	Asian & Others	Total Sample
2007 None delinquent households	3391	375	294	174	4234
2007 delinquent households	127	35	19	3	184
2010 None number households	4469	690	573	279	6011
2010 delinquent households	290	100	67	14	471
Total number in all sample	8,277	1,200	953	470	10,900

weighted number of Delinquent Households in 2007 and 2010 Surveys

Households Racial/Ethnic Delinquency Rates for 2007 and 2010 SCF Surveys

Survey Year	Delinquency Rate (%) White	Delinquency Rate (%) African America	Delinquency Rate (%) Hispanic	Delinquency Rate (%) Asian & Others	Total Sample
2007	3.62	8.43	6.13	1.81	4.17
2010	6.10	12.70	10.42	4.84	7.27
Total All Sample	5.04	11.25	9.02	3.62	6.01

Table 2: Racial/Ethnic Delinquency Rate by Type of Loans and Household Credit Card Debt for 2007 and 2010 SCF

Type of Loan	White	African American	Hispanic	Asian & Others	Total Sample
Payday loan	24.57	26.44	25.71	14.29	24.76
No Payday loan	4.63	10.06	8.39	3.29	5.47
Credit Card	2.98	7.39	5.70	2.76	3.43
No Credit Card	14.09	14.39	12.21	8.14	13.64
Mortgage loan	4.72	16.04	8.52	5.53	5.80
No Mortgage loan	5.32	9.47	9.26	2.27	6.17
ARM loan	5.77	38.89	14.58	3.13	7.99
No ARM loan	4.99	10.37	8.69	3.75	5.89
College Graduate	2.57	9.81	9.33	2.70	3.29
Not College Graduate	7.63	11.75	8.95	5.14	8.35
Household Credit Card Debt	White	African American	Hispanic	Asian & Others	Total Sample
Year 2007	85.05	49.76	56.23	88.70	79.88
Year 2010	78.84	42.66	46.56	77.47	71.18
Total number in all sample	81.48	45.08	49.74	81.70	74.71

Table 3: Racial/Ethnic Differences of Payday Loan Borrowers by Educational Attainment 2007-2010

Educational Attainment	White Rate (%)	African America Rate (%)	Hispanic Rate (%)	Asians Rate (%)	Total Rate (%)
No College Degree	3.5	7.6	4.2	6.3	4.3
College Degree	3.6	8.1	6.8	6.8	4.5
Greater than College	.4	5.8	.3	.4	.7

## Racial/Ethnic Differences of Payday Loan Borrowers Delinquency Rate 2007-2010

Households	White Rate (%)	African America Rate (%)	Hispanic Rate (%)	Asians Rate (%)	Total Rate (%)
Payday Loan	10.25	17.33	10.49	13.79	11.84
No Payday Loan	1.68	6.00	3.00	2.56	2.28

## Racial/Ethnic Differences of Payday Loan Borrowers by Missed Payment in the past year 2007-2010

Households	White Rate (%)	African America Rate (%)	Hispanic Rate (%)	Asians Rate (%)	Total Rate (%)
Missed Payment	6.44	14.65	8.80	10.09	8.27
No Missed Payment	1.37	4.73	2.17	1.83	1.79

## Racial/Ethnic Differences of Payday Loan Borrowers by Marital Status 2007-2010

Marital Status	White Rate (%)	African America Rate (%)	Hispanic Rate (%)	Asians Rate (%)	Total Rate (%)
Married	1.31	6.14	2.15	1.35	1.65
Separated	7.61	2.70	3.62	16.39	6.02
Divorced	3.98	10.32	5.33	4.31	4.95
Widowed	1.36	3.75	—	13.64	1.96
Never Married	3.38	8.13	6.39	3.25	4.90

Table 4: Racial/Ethnic Differences of Payday Loan Borrowers by Income 2007-2010

Income	White Rate (%)	African America Rate (%)	Hispanic Rate (%)	Asians Rate (%)	Total Sample Rate (%)
Less than \$20600	4.41	4.31	4.24	6.03	4.42
20601<36500	4.88	10.51	4.53	4.29	5.79
36501<59600	3.38	11.26	2.94	5.13	4.37
59601<98200	1.39	6.51	4.15	3.50	2.17
98201<140000	.41	.96	.51	—	.43
>140000	.04	4.35	—	—	.11

Racial/Ethnic Differences of Payday Loan Borrowers by Age 2007-2010

Age	White Rate (%)	African America Rate (%)	Hispanic Rate (%)	Asians Rate (%)	Total Sample Rate (%)
Less than 35	5.13	7.92	6.47	1.89	5.64
36<45	3.57	7.99	1.62	4.24	3.93
46<55	1.60	7.99	3.93	2.87	2.52
56<65	1.14	8.60	3.41	3.80	1.96
66<75	.98	1.20	—	2.22	1.00
76<85	—	2.49	—	—	.14
>85	.49	—	—	—	.47

Racial/Ethnic Differences of Payday Loan Borrowers by Year 2007-2010

Year	White Rate (%)	African America Rate (%)	Hispanic Rate (%)	Asians Rate (%)	Total Sample Rate (%)
2007	1.3	4.2	3.2	1.1	1.7
2010	2.7	8.9	3.9	4.1	3.6

Table 5: Reason why households borrow from payday loan lenders  
The SCF ask respondents "why did you choose this type of loan?"

Answers:	2007	%	2010	%
1 = Buy food	3	4	6	2.54
2 = Buy gas	2	2.67	2	.85
3 = Buy medicine / medical payments	1	1.33	2	.85
4 = Pay utilities	3	4	8	3.39
11 = Pay rent	4	5.33	3	1.27
12 = Vehicle expenses other than gas	3	4	7	2.97
13 = Pay other bills / loans	7	9.33	38	16.10
21 = Christmas	4	5.33	5	2.12
22 = Help family	5	6.67	8	3.39
31 = "Emergency" / "needed quick money"	21	28	71	30.08
32 = "Convenient"	16	21.33	62	26.27
33 = "Only option"	6	8	24	10.17
Total	75	100	236	100

Weighted Payday Loan Borrowers use of Payday Loan combined 2007-2010 SCF

Table 6: Racial/Ethnic differences in loan delinquency rate 2007 and 2010 SCF

	Combined delinquency	White delinquency	African American delinquency	Hispanic delinquency
Independent Variables				
Unemployed	0.666*** (6.08)	0.700*** (5.12)	0.369 (1.43)	0.926** (3.06)
Credit constrained	0.974*** (9.61)	1.099*** (8.55)	0.666** (2.88)	0.653* (2.30)
High debt service	1.294*** (9.60)	1.114*** (6.96)	1.347*** (4.26)	2.194*** (4.85)
College graduate	-0.0508 (-0.41)	-0.0953 (-0.64)	-0.106 (-0.38)	0.738* (1.99)
Saves	-0.375** (-2.96)	-0.496** (-3.01)	-0.0817 (-0.30)	-0.238 (-0.73)
ARM	0.798*** (4.56)	0.659** (3.05)	1.864*** (3.94)	0.259 (0.49)
S/M market	-0.141 (-1.34)	-0.247+ (-1.91)	-0.0652 (-0.27)	0.291 (1.04)
Life insurance	-0.0248 (-0.23)	-0.190 (-1.36)	-0.0851 (-0.34)	0.310 (1.04)
Poor health	0.632*** (3.67)	0.574** (2.63)	0.943* (2.39)	0.278 (0.50)
Payday loan	0.722*** (4.26)	0.719** (3.00)	0.668* (2.17)	0.727 (1.64)
Married	0.0730 (0.69)	0.183 (1.31)	0.0984 (0.40)	-0.247 (-0.94)
Log income	-0.151* (-2.20)	-0.224* (-2.56)	0.0759 (0.47)	-0.0535 (-0.26)
Age	0.135*** (6.17)	0.153*** (5.42)	0.115* (2.39)	0.0609 (0.96)
Age <sup>2</sup>	-0.00154*** (-6.55)	-0.00174*** (-5.77)	-0.00132** (-2.65)	-0.000696 (-0.97)
Year	0.297** (2.97)	0.287* (2.31)	0.359 (1.56)	0.214 (0.72)
Constant	-5.276*** (-6.51)	-4.620*** (-4.47)	-7.138*** (-3.69)	-5.642** (-2.67)
<i>N</i>	10780	8173	1196	947

*t* statistics in parentheses

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$