Economic and Demographic Differences in Debt Delinquent Behavior

Being late in debt payments face many negative consequences: a late fee will be charged, the practice will be recorded in credit reports, and the consumers will be the potential target of universal default. Being late for two months or more is considered a sign of financial difficulties. This study used data from the 2004 Survey of Consumer Finance to examine economic and demographic differences in late payment behavior. Both bivariate and multivariate analyses indicate that income, wealth, home ownership, age, family type, and race/ethnicity are associated with debt delinquent behavior. Lower income, lower wealth, non-homeowner, younger and mid-aged, married with children, single female with children, and black consumers are more likely than their counterparts to be late in debt payments. Consumers who are late in debt payment for two or more months are more likely than those who make payments on time to pay high interest rates (20% or higher) on their credit card debts. The findings have implications for consumer educators and policy makers. Consumer educators need to provide effective strategies and information for these consumers to avoid debt delinquent behavior; furthermore, policy makers should consider the vulnerability of these consumers and formulate appropriate policies to protect them.

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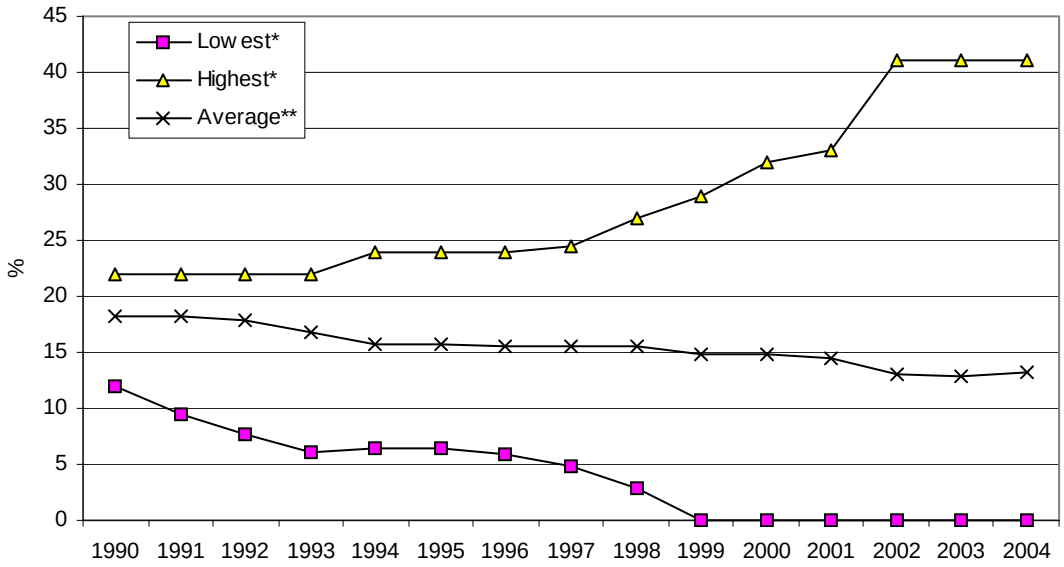
Being late or missing a debt payment will have negative consequences for consumers. The most direct consequence is that a late fee will be charged, which, in recent years, can be as high as $39. Since 1993, late fees have risen by 194% (Cardweb, 2005). In addition, the behavior will be recorded by credit reports, often resulting in lower credit scores. Consumers who are late in debt payments with low credit scores may be the target of universal default, a controversial policy employed by many financial institutions. Many credit card issuers now routinely check their cardholders' credit reports and raise the interest rate on the card if there has been a change in the consumer's score, which is called the universal default policy. For example, if a consumer is late on her/his payment of the credit card issued by Bank A, Bank B will now raise the cardholder's interest rate. According to a survey by Consumer Action, 45% of banks reported 6having universal default policies. The most commonly cited circumstances that trigger a universal default rate hike are credit scores getting worse and paying mortgage, car loans, or other creditors late (Consumer Action, 2005). Consumer advocates consider this policy unfair to consumers and have raised the issue in front of the Senate Banking Committee (Holloway, 2005). New York state legislature even passed a law to ban this practice (Consumer Action, 2006) but it was vetoed by the governor (Kelly, 2006).

Universal default is one of many innovations that resulted from financial deregulation in the U.S. The deregulation makes financial institutions prosper, such as the credit card market. Before the deregulation, credit card divisions in banks always lost money, but after the deregulation, the credit card divisions became cash cows (see Manning, 2000). Ausubel (1991) demonstrated that even the structure of the credit card industry looks competitive after the deregulation, but its behavior is inconsistent with the outcome of economic theory predicts because it earned three to five times the ordinary rate of return in banking during the period 1983-1988. The profit of the credit card industry remained high in late 1990s (Ausubel, 1997). Ellis (1998) argued that the 1978 Supreme Court decision ("Marquette") fundamentally altered the market for credit card loans in a way that significantly expanded the availability of credit and increased the average risk profile of borrowers. The result was a substantial expansion in credit card availability, a reduction in average credit quality, and a secular increase in personal bankruptcies. The good news for consumers, especially low income consumers, is that they have broader access to credit (Bird, Hogstrom, & Wild, 1999; Johnson, 2005; Lyons, 2003). The bad news is that the probability of default among these consumers may rise too. There may be an adverse selection process going on in the credit market. A study using market experiments data provided by a major credit card issuer presented evidence supporting this theory and found that consumers with worse credit risks are more likely to respond to credit card solicitation and to accept inferior terms of the solicitation. Consumers who accept inferior offers are significantly more likely to default (Ausubel, 1999).

Deregulation of the credit card markets also resulted in diverse credit pricing, which ranged from 0 or low teaser rates to over 40% punitive rates (see Figure 1 for the lowest, highest, and average credit card interest rates in

the last fifteen years). Again, this situation brings good and bad news for consumers. Some consumers enjoy low even zero interest rates, some use normal interest rates, while some others may suffer punitive, high interest rates on credit card debts. Who are consumers who lose from the financial deregulation? This study provides some insights for this broad question.

Figure 1: Credit Card Interest Rates, 1990-2004



Sources: * Cardweb; ** Federal Reserve Board, 2005

In this study, we examine economic and demographic factors that are associated with the debt delinquent behavior using data from the 2004 Survey of Consumer Finances. The purpose of the study is to identify consumers with certain socio-economic characteristics who are disproportionably delinquent in debt payments and are potential targets of universal default. Findings of the study have implications for consumer educators who need to provide effective education programs and for policy makers who are making public policies that may affect the well-being of these at risk consumers.

Previous Studies on Debt Delinquent Behavior

In an early study that used 1983 Survey of Consumer Finance data to examine factors associated with late payment behavior, Canner and Luckett (1990) found the late payment behavior is associated with marital status, age, number of children, race, and several other variables. But in their logistic regression results, they did not find the association between income and late payment behavior.

Descriptive statistics of consumer debt delinquent behavior in recent years can be found in Federal Reserve Board staff papers (Aizcorbe, Kennickell, & Moore, 2003; Bucks, Kennickell, & Moore, 2006). In these studies, the consumer debt delinquent behavior is measured by the percentage of consumers whose debt payments are late for two or more months. The trend of this measure has increased since early 1990s, from 6% in 1992 to 8.9% in 2004 with fluctuations. However, the increasing trends are more consistent in several subpopulations. For example, for consumers who are at the bottom 20 percentile income, younger than 35 years old, at the bottom 25 percentile net worth, and non-homeowners, proportions of the delinquent behavior among these populations have been going up linearly since 1995.

Johnson (2005) documented recent changes in the credit card market in last fifteen years, using data from Surveys of Consumer Finance and concluded that because of the improvement of credit-scoring technology and risk-based pricing of credit card debt, the share of households, particularly lower-income households, with a credit card

has increased. She used the late payment behavior as an independent variable to predict the credit card holding status and found that the late payment behavior is a significant predictor of not holding a credit card. She also found that the late payment behavior is more likely to be practiced by estimated new credit card holders who are characterized as low income, low wealth, younger, with more children, not married, etc.

Baeck and Kim (2005) reported a study using data from the 2001 Survey of Consumer Finances. They examined debt repayment behavior of older consumers and found several factors that associated with the debt delinquent behavior among consumers aged 65 or older, such as age, race, and several other variables.

A recent study surveyed credit card use among low- and middle-income consumers nationwide and found that seven out of ten households report using their credit cards as a safety net such as paying for car repairs, basic living expenses, medical expenses, or house repairs. Just under half had missed or were late with a payment in the last year, with nearly a quarter of households reporting paying a late fee at least one or two times in the past year (Demos and Center for Responsible Lending, 2005).

Several studies did not focus on late payment behavior but documented the broader credit access among low income and minority consumers in the last two decades after the financial deregulation. Lyons (2003) estimated trends of credit access of U.S. families. According to her findings, the ability of all households to obtain their desired debt levels increased after 1983 and more dramatically between 1992 and 1998. Those experiencing the greatest gains in credit access were black households and households with low permanent earnings. Another study using data from the 1983-1995 SCF traced the evolution of the debt position of the poor as compared to that of the population at large (Bird, Hogstrom, & Wild, 1999) and found that the fraction of poor households with a credit card more than doubled and the average balances held on these cards rose almost as rapidly as the balances of nonpoor households. Draut and Silva (2003) used the SCF data to document credit card use trends among American families in 1989-2001. They found that the proportion of households with income under $10,000 that hold credit card debts increased by 184%, the largest increase among all income groups, from 1989 to 2001. Black and Hispanic consumers are more likely than whites to carry credit card balances.

No study is found to examine family type and debt payment behavior. However, most single mother families belong to low-income families. A study documented the trends of family structure and income inequality during 1976-2000 and argued that single mother families are always at the bottom of the income distribution and this fact contributes to their greater income inequality within the group (Martin, 2006).

Based on previous studies, this study expands the literature in several aspects. First, this study conducts both bivariate and multivariate analyses to identify economic and demographic variables that are associated with the debt delinquent behavior with the latest available SCF data. Second, it examines a new variable, family type, which is ignored by previous studies. Third, it examines the association between the debt delinquent behavior and the potential outcome variable, paying high interest rates (20% or higher) on credit card debts, which has not done in previous studies. In this study, we focus on three economic variables and three demographic variables: income, net worth, home ownership, age, race/ethnicity, and family type. Based on the literature review, we propose following hypotheses:

1. Consumers with following characteristics—low income, low wealth, non-homeowner, young, single female with children, black, Hispanic—are more likely to be late in debt payments.
2. Consumers who are late for debt payments are more likely to pay high interest rates on credit card debts.

Method

We used data from 2004 Survey of Consumer Finance (SCF), which is the latest version of this data set. SCF is a triennial national consumer finance survey sponsored by the Federal Reserve Board. The survey was conducted by the National Opinion Research Center at University of Chicago. Details about the data set can be found from a *Federal Reserve Bulletin* article (Bucks et al., 2006). The data set includes two random samples. The first is a standard multi-stage area-probability sample that is selected to provide good coverage of characteristics broadly distributed in the population. The second is a supplemental sample that is selected to disproportionately include wealthy families who hold a relatively large share of such thinly held assets as non-corporate businesses and tax-exempt bonds. In the data sets available to public, the 2004 data has 4,519 observations (see Kennickell 2006, for a discussion about the difference of sample sizes between original data sets and public use data sets). In statistical analyses, we combined the full public data set and the extract of the full public data set together (www.federalreserve.gov/Pubs/oss/oss2/2004/scf2004home.html).

In SCF, two questions are about late or missed payments. The wording for asking about late or missed payment question (X3004) is “Now thinking of all the various loan or mortgage payments you made during last year, were all the payments made the way they were scheduled, or were payments on any of the loans sometimes made

later or missed? 1- All paid as scheduled or ahead of schedule; 5 - Sometimes got behind or missed payments; 0 - Inapplicable." The wording of the following question (X3005) is "(if answered 5 in X3004) Were you ever behind in your payments by two months or more? 1 - Yes; 5 - No; 0. Inapplicable." In this study, we generated a new variable LATEPAY, by recoding the variables X3004 and X3005, which has values 1- All paid as scheduled or ahead of schedule; 2- Sometimes got behind or missed payments, but paid no later than two months; 3 - Ever behind payments by two months or more. In data analyses of LATEPAY, we included consumers who have any debts only, which has an unweighted sample size of 3,483.

In addition to the two questions about late or missed payments, one question asked about the interest rate on the credit card account that has the highest balance. The wording of the question (X7132) is: "What interest rate do you pay on the card where you have the largest balance? What is the interest rate on the card you got most recently? What interest rate do you pay on this card?" Based on X7132, we generated a new variable INT with values 1- pay interest rate of 20% or higher; 2 - pay interest rate less than 20%. In data analyses of INT, we included those who have credit card debts with an unweighted sample size of 2,930.

We calculated cross tables of these variables with the weighted sample by income, family type, racial/ethnic, age, house ownership, and net worth groups. Three income groups are included that are families with income of bottom 40% (lower than $33,867), middle 40% ($33,867-88,311), and top 20% (higher than $88,311). Six family types are married with children, male single with children, female single with children, male single, female single, and married without children. The racial/ethnic groups include white, black, Hispanic, and other racial groups (Asian, Native American, Pacific Islander, etc.). The age groups include three categories: younger than 35, 35 – 64, and 65 or older. House ownership has two categories: homeowner and other. Net worth has three groups: low 25% (Lower than $13,150), middle 50% ($13,150-$328,080), and top 25% (higher than $328,080).

In addition to bivariate analyses, we conducted two multiple logistic regressions. In the first regression model, economic and demographic variables were regressed with the focused dependent variable, debt payment behavior (LATEPAY). In the second regression, paying 20% or higher interest rates (INT) was regressed with one debt payment variable and several economic and demographic variables.

Findings

Bivariate Analyses of Late Payment Behavior.

Based on 2004 Survey of Consumer Finances, we examined associations between late payment behavior and selected economic and demographic variables. Among consumers who have scheduled payment of any loans, 78.67% make payments on schedule, 12.41% report late payments but no later than two months, and 8.92% make late payments for more than two months (Table 1). Low income (bottom 40%) consumers are more likely to report late payments within or more than two months (14.83% and 14.85% respectively) than both middle income (13.24% and 8.73%) and top 20% income consumers (7.58% and 1.33%).

Consumers at the bottom 25% net worth are more likely to be late for less than two months (23.41%) and for two or more months (17.94%) in debt payments. Consumers at the middle 50% net worth are more likely than average to be late for less than two months (13.03%).

As shown in Table 1, whether or not consumers own home differs in late payment behavior. Consumers who do not own home are more likely than homeowners to be late for less than two months (18.49%) and for two or more months (18.80%) in debt payments.

Regarding family types, single females with any children are most likely to be late in debt payments than other family types, in which 16.06% make late payments for no more than two months and 20.86% make late payment for more than two months. Single males are more likely to be late for two or more months (11.47%). In addition, married with children (14.44%), single males with children (14.89%), and single females (13.37%) are more likely to be late for no more than two month.

Race/ethnicity shows differences in late payment behavior. Among these consumers, blacks have the highest proportion of making payments late—21.16% make late payments for no more than two months, and 18.87% make late payments for more than two months. In addition, Hispanic consumers are more likely to be late for less than two months (18.46%).

Regarding age groups, compared with consumers aged 65 years or older, consumers younger than 35 years old are more likely to be late in debt payments: 15.03% are late for less than two months, and 13.86% are late for two or more months. The middle-age (35-64) consumers are more likely to be late for less than two months (13.03%).

Table 1
Late Payment Behavior By Demographic Variables & Interest Rates (%)

	On Schedule	Late for no more than 2 months	Late for 2 months or more	Total sample
All sample	78.67	12.41	8.92	100
Income percentile* **				
Bottom 40%	70.32	14.83	14.85	31.64
Middle 40%	78.04	13.24	8.73	44.82
Top 20%	91.09	7.58	1.33	23.54
Family type* **				
Married with children	77.32	14.44	8.23	36.97
Single male with children	78.56	14.89	6.55	2.47
Single female with children	63.26	16.06	20.68	9.79
Single male	77.04	11.49	11.47	10.66
Single female	78.38	13.37	8.25	14.10
Married without children	87.20	7.77	5.03	26.02
Race/ethnicity* **				
black / African American	59.97	21.16	18.87	12.60
Hispanic	73.96	18.46	7.58	8.26
Asian or Other	80.81	11.26	7.93	3.81
white non-Hispanic	82.20	10.34	7.46	75.33
Age* **				
<35	71.12	15.03	13.86	22.71
35-64	76.68	13.03	8.30	62.84
>=65	90.49	5.61	3.90	14.45
Home ownership* **				
Home owners	84.02	10.37	5.61	74.89
Renters or other	62.71	18.49	18.80	25.11
Net worth* **				
Bottom 25%	58.64	17.94	23.41	20.61
Middle 50%	79.90	13.03	7.07	54.38
Top 25%	92.49	6.49	1.02	25.01

Note: data are weighted, all implicates are used. Chi-Square tests are conducted.
* $p<.05$; ** $p<.01$; *** $p<.001$

Logistic Analyses of Late Payment Behavior.

Table 3 presents the results of logistic analyses of late payment behaviors. Among economic and demographic variables, eight significant predictors of late payment behaviors are found: bottom 40% income, middle 40% income, married with children, single female with children, black/African American, age at 35-64, home ownership, and bottom 25% net worth.

Of the income percentile variables, compared to the top 20 percentile, consumers who are at the low 40 percentile and the middle 40 percentile are more likely to be late in debt payments. Compared to consumers at the top 25% of net worth, the group at bottom 25% of net worth are more likely to make payments late. Homeowners are less likely than non-homeowners to be late in debt payments.

For family type, consumers who are married with children and single females with children are more likely than those married without children to make payments late. Compared with white non-Hispanic, consumers who are black are more likely to make debt payments late. Consumers at 35-64 are more likely than those 65 or older to be late in debt payments. Interestingly, the younger age group (34 or younger) does not show a difference from the old age group (>65), which is inconsistent with the bivariate analysis result.

Table 2

Logistic Regression: Probability of Late Payment Behavior

Variable	Estimated parameter	Odds estimate
Intercept 3	-2.7430	-
Intercept 2	-1.4910	-
Income percentile		
Bottom 40%	0.2591**	2.011
Middle 40%	0.1804**	1.859
Top 20% (r.c.)		
Family type		
Married with children	0.3068**	1.605
Single male with children	-0.0487	1.124
Single female with children	0.3366**	1.653
Single male	-0.2189	0.948
Single female	-0.2099	0.957
Married without children (r.c.)		
Racial/ethnic		
Black / African American	0.5971***	2.164
Hispanic	-0.2225	0.953
Other	-0.2000	0.957
White non-Hispanic (r.c.)		
Age		
<35	0.1512	1.773
35-64	0.2704***	1.998
>=65 (r.c.)		
Home ownership		
Home owners	- 0.2672***	0.586
Renters or other (r.c.)		
Net worth		
Bottom 25%	0.6314***	3.636
Middle 50%	0.0281	1.989
Top 25% (r.c.)		
Total observations	3483	
Percent concordant	74.5	
-2log of likelihood	3690.633	
$\chi^2 = 506.7034$ ($p<.0001$)		

Note: data are unweighted, implicate 1 is used. r.c. = reference category.

* $p<.05$; ** $p<.01$; *** $p<.001$

Table 3

*Late Payment Behavior By Interest Rates (%)****

	Pay interests rate >=20%	Pay interests rate < 20%	Total sample
Payment behavior			
Make payment on time	7.69	92.31	83.05
Make payment late for no more than two months	15.44	84.56	11.04
Make payment late for two or more months	23.14	76.86	5.90
Total sample	9.46	90.54	100.00

Note: data are weighted, all implicates are used. Chi-Square tests are conducted.

* $p<.05$; ** $p<.01$; *** $p<.001$

Table 4
Logistic Regression: Probability of Interest Rate Higher than 20%

Variable	Estimated parameter	Odds estimate
Intercept 1	-2.1290***	-
Payment Behavior		
Make payment late but no later than 2 months	-0.0159	1.590
Make payment more than two months late	0.4956**	2.652
Make payment on time (r.c.)		
Income percentile		
Bottom 40%	0.4878***	3.093
Middle 40%	0.1535	2.214
Top 20% (r.c.)		
Family type		
Married with children	0.1717	1.192
Single male with children	-0.3009	0.743
Single female with children	0.0849	1.093
Single male	-0.1747	0.843
Single female	0.2225	1.254
Married without children (r.c.)		
Racial/ethnic		
Black / African American	0.1704	1.390
Hispanic	0.1176	1.318
Asian and Other	-0.1293	1.030
White non-Hispanic (r.c.)		
Age		
<35	0.0403	1.144
35-64	0.0544	1.161
>=65 (r.c.)		
Home ownership		
Home owners	0.0307	1.063
Renters or other (r.c.)		
Net worth		
Bottom 25%	0.2327	1.618
Middle 50%	0.0161	1.303
Top 25% (r.c.)		
Total observations	2930	
Percent concordant	69.1	
-2log of likelihood	1547.158	
$\chi^2 = 114.7276$ ($p<.0001$)		

Note: data are unweighted, implicate 1 is used. r.c. = reference category
* $p<.05$; ** $p<.01$; *** $p<.001$

Late Payment Behavior and Paying High Interest Rates.

To test Hypothesis 2, we conducted both bivariate and multivariate analyses. We restricted samples to those who carry credit card debts only. The Chi-square result indicates that consumers who are late in debt payments are more likely to pay high interest rates on credit card debts (Table 3). For example, 15.44% of consumers who are late for less than two months and 23.14% of consumers who are late for two or more months are paying 20% or higher interest rates, compared with 7.69% of those who make debt payments on time.

We have conducted logistic regression analysis in which the interest rate on credit card debts was used as the dependent variable, while late payment behavior and several economic and demographic variables are independent variables. Results are presented in Table 4. We found that those groups who paid late for two or more months and are at the bottom 40% income are associated with paying the high interest rate. Compared to consumers who make payments on time, those who make payments late for two or more months are 2.652 times more likely to

pay 20% or higher interest rates on credit card debts. Compared to consumers who are at top 20% income, those at bottom 40% income are 3.093 times more likely to pay 20% or higher interest rates on credit card debts.

Conclusions and Implications

The last two decades of deregulating of the credit card market provided wider credit access for consumers, especially low income and other economically disadvantaged consumers, but it also seduced some consumers into deep debts, which resulted in these consumers paying higher interest rates and other fees. Evidence from this study, using data from the 2004 Survey of Consumer Finance, indicates that low income, low wealth, non-homeowner, young and mid-aged, married with children, single male with children, and black consumers are more likely than their counterparts to be late in debt payments, which leads to these consumers becoming potential targets of universal default. In addition, consumers who are late in any debt payments are more likely than those who make payments on time to pay 20% or higher interest rates on their credit card debts.

Implications for Consumer Educators.

This study identified several consumer populations that need help to avoid debt delinquent behavior. Educators can use this information to target these consumers and to provide effective and action-oriented educational programs for them. The findings indicate that low income, low wealth, non-home owners, young and mid-aged, married with children, single female with children, and black consumers are more likely than their counterparts to be late in debt payments. Educators should use the information to locate residential areas in which these types of consumers are concentrated and provide them effective education programs. The focus of the programs should be about how to avoid late payment behavior. The educators should explain to these groups the negative consequences of late payment behaviors, remind them how to read credit card and other debt agreements carefully, and provide them tips that will enable them to act and change their late payment behaviors. Effective programs should relate knowledge and behavior (Hilgert, Hogarth, & Beverly, 2003) while focusing on action to help consumers change behavior step by step, such as integrating evidence based, well established psychological framework, the transtheoretical model of change (TTM), to the educational program (Xiao, O'Neill, Prochaska, Kerbel, Brennan, & Bristow, 2004).

Implications for Policy Makers.

Public policy makers should be aware of the consequences of financial deregulation in the last two decades that has brought benefits and pitfalls for consumers disproportionably. The policy makers need to understand that because of the financial deregulation, some consumers with certain characteristics are more vulnerable than others. Any reform and new legislation should consider these facts. We need to ask ourselves, should economically disadvantaged consumers deserve special protection in terms of debt and other financial services from the government? For example, Bar-Gill (2004) analyzed the credit card contracts from a legal perspective and pointed out that card issuers take advantage of the weakness of consumers, such as lack self-control and underestimation of the consequences of delinquency potentials. Based on the behavior theories of law and economics, he proposed several legal interventions in the credit card market. Some of his suggestions could be helpful in forming new regulations and laws.

References

Aizcorbe, A. M., Kennickell, A. B., & Moore, K. B. (2003, January). Recent changes in U.S. family finances: Evidence from the 1998 and 2001 survey of consumer finances. *Federal Reserve Bulletin,*1-32**.**

Ausubel, L. M. (1991). Failure of competition in the credit card market. *American Economic Review, 81*(1), 50-81.

Ausubel, L. M. (1997). Credit card defaults, credit card profits, and bankruptcy. *American Bankruptcy Law Journal*, *71*, 249-70.

Ausubel, L. M. (1999). Adverse Selection in Credit Card Market. Working paper. University of Maryland.

Baeck, S., & Kim, H. (2005). Older consumer's debt repayment behaviors. *Consumer Interests Annual, 51*, 280-281.

Bar-Gill, O. (2004). Seduction by plastic. *Northwestern University Law Review, 98*(4), 1373-1434.

Bird, E. J., & Hagstrom, P. A., & Wild, R. (1999). Credit card debts of the poor: High and rising. *Journal of Policy Analysis and Management, 18*(1), 125-133.

Bucks, B. K., Kennickell, A. B., & Moore, K. B. (2006). Recent changes in U.S. family finances: Evidence from the 2001 and 2004 Survey of Consumer Finances. *Federal Reserve Bulletin,* A1-A38.

Canner, G., B., & Luckett, C. A. (1990). Consumer debt repayment woes: Insights from a household survey. *Journal of Retail Banking, 12*(1), 55-62.

Cardweb (2005). Late fees (8/5/05). Available: www.cardweb.com.

Consumer Action (2005). The 2005 credit card survey. Available at: http://www.consumer-action.org/English/library/credit_cards/index.php.

Consumer Action (2006). NY State legislature bans unfair credit card "universal default." Retrieved September 29, 2006, from http://www.cosumer-action.org/press/articles.

Demos and Center for Responsible Lending (2005). The plastic safety net: The reality behind debt in America – Findings fro a national household survey of credit card debt among low- and middle-income households. New York: Authors.

Draut T., & Silva, J. (2003). Borrowing to make ends meet: The growth of credit card debt in the 90's. New York, NY: Demos. Available at: http://www.demos-usa.org/home.cfm.

Ellis, D, (1998, March). The effect of consumer interest rate deregulation on credit card volumes, charge-offs and personal bankruptcy rates. *Bank Trends, 98-05,* 1-11.

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin,* (July), 309-322.

Holloway, J. D. (2005). Consumer action speaks to Senate Banking Committee. *Consumer Action News*, Summer, p1, 9. Available at: www.consumer-action.org.

Johnson, K. W. (2005). Recent development in the credit card market and the financial obligations ration. *Federal Reserve Bulletin* (Autumn), 473-486.

Kelly, N. (2006) Bill which would have outlawed universal default clause is vetoed. Retrieved September 29, 2006, from http://credit.about.com/b/a/007335.htm.

Kennickell, A. B. (2006). Codebook of Survey of Consumer Finance, 2004. Available at: http://www.federalreserve.gov/.

Lyons, A.C. (2003). How credit access has changed over time for U. S. households. *Journal of Consumer Affairs*, *37*(Winter), 231-255.

Manning, R. D. (2000). *Credit card nation: The consequences of America's addition to credit.* New York: Basic Books.

Martin, M. A. (2006). Family structure and income inequality in families with children, 1976 to 2000. *Demography, 43*(3), 421-445.

Xiao, J. J., O'Neill, B., Prochaska, J., Kerbel, C, Brennan, P., & Bristow, B. (2004). A consumer education program based on the Transtheoretical Model of Change. *International Journal of Consumer Studies, 28*(1), 55-65.

Endnotes

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