

THE IMPACT OF THE RECESSION ON BUSINESS STUDENTS' CREDIT CARD USE

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ABSTRACT

This research investigates whether and how the credit card use of students has changed between 2008 and 2010, a time in which one of the most severe economic recessions in recent history took place. Overall, it seems that students have become more judicious with their credit cards. Results suggest that although the number of credit cards that students have has remained about the same, the way that students are using their cards has changed in important ways. Credit card debt has dropped by almost half and the amount of monthly charges has fallen by one-third. Students are using their cards less and carrying lower balances. Students seem to recognize how easy it is to overspend with a credit card and seem to be gravitating toward a “pay as you go strategy, as evidenced by a significant increase in the use of debit cards at the same time that credit card use has declined.

INTRODUCTION

Credit-card use among college students has received much attention from college administrators, parents, and even the banking industry. Susswein wrote that “college students are part of a very privileged class these days. They are held to a different standard than the rest of us. College students with no job, no

assets, no income, no credit history, and no means of supporting themselves are eligible for unsecured credit—and in some cases quite a bit of credit,” (Susswein, 1995, 21).

According to the most recent NellieMae report in 2005, there is both good news and bad news for college students with credit cards. Seventy-six percent of undergraduates began the school year with a credit card, an eight percent decrease from 2001. The average credit-card balance for college students was \$2,169, a seven percent reduction from 2001 and the lowest balance reported since 1998. It seems that the freshman year in college is when most (56 percent) get their first credit card. As for the bad news, as the students progress through the ranks in college so too does their credit-card usage, with 91 percent of seniors having a credit card compared to only 42 percent of freshmen. The report also indicated that 56 percent of the seniors carry four or more credit cards with an average balance of \$2,864. Only 24 percent of the students said that they paid their credit cards off each month, and 11 percent are making less than minimum payments on their debt.

The report continues that most of them got their credit cards through mail solicitation and use them most often for school supplies, textbooks, and food. The students also do not have a clear idea of how much their outstanding balances are on their cards. Students from the northeast have the lowest credit-card balances while students from the Midwest have the highest. The credit-card usage by college students is a concern and worthy of investigation because of the mounting debt college students face but also because of the debt they incur from increasing tuition costs at both public and private institutions. Colleges are graduating a class of citizens with overwhelming debt into a work environment in a suffering economy with fewer and fewer high-paying careers. The purpose of this research is to investigate whether or not the current recession has had an impact on business students' use and attitudes toward credit cards.

BACKGROUND

Credit-card usage by college students has been the subject of interest with the popular press (e.g., Palmer, 2007 and Brandon, 2007) as well as to several disciplines in the academy. Several researchers have investigated college students' knowledge of credit-card usage. Warwick and Mansfield (2000) found that the majority of students did not know the interest rate that they were paying on their credit card. However, almost half of them did know their credit-card balance and credit limit. Kenner, Mize, Gilbert, and Saracino conducted a pretest-posttest survey of 360 undergraduate college students and found that, “students are in need of consumer knowledge information prior to entering college and incurring credit-card debt,” (Kenner et al., 2001, 76). They (2001) found that college students were particularly ignorant about interest rates, credit balances, minimum payments, and future ability to borrow and acquire additional credit. Jones (2005) found that freshmen students knew very little about credit, and that female students and non-white students scored lower than their counterparts.

Several researchers have investigated college students' attitudes toward credit in the hopes of understanding why they are so eager to sink into debt. Davies and Lea (1995) found that students were a relatively low-income group with a highly tolerant attitude toward their high debt. They (1995) concluded that students tend to come from prosperous socioeconomic groups, and they view their low incomes as temporary so they are using credit cards to sustain the lifestyle that was provided for them prior to college and that they expect upon graduation. Hayhoe, Leach, Allen, and Edwards (2005) investigated college students' attitudes toward credit cards (cognitive, affective, and behavioral), the number of credit cards they had, and the frequency and pleasantness of imagined interactions with parents about their credit. They (2005) found that college students without credit cards scored higher on the cognitive and behavioral aspects while the students with credit cards scored higher on the affective component of attitudes toward credit. They (2005) also found that students without credit cards had more imagined interactions with their parents about credit than the students with credit cards.

Norvilitis, Szablicki, and Wilson (2003) investigated why college students accumulated large amounts of debt. They found that students who sought credit cards from on-campus sources had greater credit-card debt than students who received their credit cards from other sources. The students were under the mistaken perception that their colleges supported these companies. They (2003) also found that most of the students with credit-card debt felt that the debt was transitory and would be paid off once they were graduated. The authors (2003) felt that a need existed to educate college students about the long-term consequences of debt.

Characteristics of college students have been studied to understand credit-card usage. McCall and Eckrich (2006) focused on the gender of the college students and their attitudes toward credit and found that female students reported shopping more, having more credit cards, and repaying debt of greater importance than male students. Hayhoe, Leach, and Turner (1999) used several scales to measure college students' use of credit. They looked at students who had four or more credit cards compared to students with less than four credit cards and found nine variables that were significant predictors: a high affective attitude credit attitude (high score from using credit cards), age, the cognitive credit attitude (consequence of using credit cards), gender, having taken a course in personal finance, less likely to borrow from friends or relatives, the retention money attitude (low score), use of money as a reward, and preparing a list before shopping.

Pinto, Parente, and Palmer (2000) used a materialism scale and measured the number of credit cards owned as well as the average balance owed. They (2000) found no differences between those college students who scored high or low on the materialism scale on either the number of cards or the average balance owed. However, they did find that the low-scoring materialism group used their credit cards less frequently, spent less, had lower outstanding balances, and did not attempt to justify their use of the cards (e.g., method of identification, need to build credit history, and definition of necessity versus luxury) in the same way as the high-scoring materialism group. Mansfield, Pinto, and Parente (2003) used a self-control scale with six subscales to compare college students who paid off their credit cards monthly versus those students who carried forward a balance, and they found a significant difference between the two groups on self control and specifically on the impulsivity subscale suggesting that college students may be living beyond their means and that credit makes it easier for them to act on impulse purchases. Pinto, Mansfield, and Parente (2004) also looked at the students' self esteem and locus of control in relation to their attitudes toward credit and debt. They looked at students who paid off their credit cards monthly versus those students who carried a balance forward and found no significant differences between the two groups based on locus of control. However, they did find that the heavy users of credit cards recognized the negative consequences of using their credit cards, but it did not limit their usage. Joo, Grable, and Bagwell (2003) did find that the students' ethnic background, their parents' use of credit cards (role models), their credit card ownership, academic level, money ethic (how much they value money), and locus of control were associated with the students' attitudes toward credit.

Roberts and Jones (2001) used three dimensions (power prestige, retention-time, distrust—hesitant, suspicious, and doubtful, and anxiety—money as a source of anxiety and a source of protection from anxiety) on a money attitude scale. First, they found that credit-card usage does increase compulsive buying. Secondly, they found that power and prestige or status is associated with compulsive buying. Lastly, they found a relationship between compulsive buying and anxiety in that shopping is used to reduce stress, making anxiety both an antecedent and an outcome of compulsive buying.

In 2003, The Center for Student Affairs Research (CSAR) located at the University of Oklahoma worked closely with the Council on Student Affairs (a group consisting of vice presidents or deans of students affairs in the state of Oklahoma) and the Oklahoma State Regents for Higher Education staff in developing an instrument for assessing significant issues related to credit-card use among college students in Oklahoma. A total of 28 institutions within the state participated in the study. (Tan, 2003) The study

revealed important information for institutions regarding credit-card companies, college students, and parents. While it was found that most students were indeed managing their debts well, there was reason for concern that over a quarter of them had found themselves in a financial bind due to their credit-card usage. Additionally, there was significant evidence to indicate that this debt had influenced their collegiate experiences in a negative way. Oftentimes, this effect involved the decision to carry a reduced course load and, thus, prolong the graduation date. Students often had to take fewer courses so as to find part-time employment to pay off the credit-card debt. Because of the need to be employed while attending college, there was less time to be involved in extracurricular activities, internships, co-op programs, etc. Some students felt that their credit-card debt and the need to pay off their credit in a timely fashion, actually kept them from having the 'real college experience.' The study also determined that students who had problems with credit-card debt believed that the college could and should have done more to educate them on the meaning of credit and the advantages and disadvantages of credit-card use. Those students also indicated a willingness to attend useful programs about financial responsibilities and debt management. (Tan, 2003)

Many articles call for financial education for college students. While Borden, Lee, Serido, and Collins (2008) reported success (increased financial knowledge, increased responsible attitudes toward credit, and decreased avoidant attitudes toward credit) with a financial education seminar, other studies were less positive about the nature of increasing financial literacy. Lyonsm, Palmer, Jayaratne, and Scherpf (2006) focused on the current state of financial education and how it was being evaluated. They advocated for a set of flexible, evaluation tools that could be accommodated to the various methods of program delivery. Richter and Prawitz (2010) administered a pretest and posttest survey in their personal finance classes. They found that the financial education did not have the intended effect of getting students to use their credit cards less. Instead, they (2010) found that students intended to use their credit cards frequently and for the majority of their shopping. The authors concluded that financial education is needed prior to the students getting the credit cards and incurring debt. Robb and Sharpe (2009) also found that students with higher levels of financial knowledge also had significantly higher credit-card debt.

Debit cards and college students' attitudes toward them have not received the depth of academic research attention that credit cards have. Items from the College Board (2010) provide parents with a discussion about whether or not to send their student off to college with a credit card or a debit card. A primer for college students on how to handle debit and credit cards was offered by Pratt (2008) in an attempt to educate them about how both types of cards work. O'Shaughnessy (2010) posits the debit card as the solution to student credit-card debt, "turning off the easy credit spigot shouldn't be that tough. Here's why: many students today use debit cards, which are just as convenient as student credit cards but not as financially scary," (O'Shaughnessy, 2010, 1). The author continues that because the debit cards are connected to the students' checking accounts, the students would be cognizant of what they can spend.

Chu (2006) in *USA Today* wrote a critical article about the university's own debit card procedure that made students open up a bank account to use a debit card on campus for purchasing books and supplies. Not only did the students not have a choice of the financial institution, but they were also frequently charged for overdrawing on their accounts, and the universities benefited from the contract (up to one million dollars a year at larger universities) that they had with the banks. At the time of the article more than half of the 15 largest universities had bank card relationships, and the author felt that it was only a matter of time until smaller universities would also have the bank relationship.

In 2008, Chu reported in *USA Today* that the banks were getting even more aggressive. A study released by the U.S. Public Interest Research Group showed that 76% of students say credit cards had been marketed to them through tables set up on or near college campuses and nearly a third of these students had been offered a free gift to sign up (2008).

At the writing of this paper, the United States is slowly beginning to emerge for the most serious and prolonged economic recession in nearly 30 years. Unemployment is at a level unseen in a generation and bankruptcies and home foreclosures are at record levels, all while housing values decline and wages stagnate. This recession shook the core of the very financial system of the United States and controversial federal government intervention is believed by some to have averted a total collapse of the financial system.

In this environment resides the graduating college senior, who has invested mightily in his or her education, and is about to enter the workplace, burdened by high debt and low job prospects. What must they think? While copious amounts of research has been focused on the credit card habits of college students, none have addressed the effects of this dramatic economic downturn on the attitudes and behaviors of college students toward debt, credit cards and debit cards. This research addresses this important issue.

METHODOLOGY

A survey was developed to collect a broad range of information regarding students’ use of both credit and debit cards, as well as their perceptions and feelings toward credit and debit cards. The survey included a mix of open-ended questions, multiple choice questions, and scaled items. Demographic information was collected as well for classification purposes. A convenience sample of students in several upper level undergraduate business classes were asked to complete the survey in summer, 2008, just months before the bottom fell out of the stock market, and summer, 2010, when the outlook began to improve. Participation in the survey was completely voluntary, and students did not receive any compensation or course credit for their participation.

Table 1 presents the demographic classifications of the two samples with Chi-square analyses and F-tests used to measure differences in the two samples. While there were no significant differences in the gender, race, and marital-status classifications, the 2008 sample was older. Significant differences were also observed in the income categories of the two samples with the 2010 sample earning significantly less than the 2008 sample. As might be expected a significant difference was also observed in the employment status of the two samples with more full-time employees in the 2008 sample.

RESULTS

The analysis began with a comparison of how many credit and debit cards students in the two samples had. Seventy-eight percent of the 2008 students had at least one credit card while a nearly identical percentage (77.9%) of the 2010 students had at least one credit card (Chi square= .000; p=.990). The average age at which students in the 2008 sample received their first credit card was 18.6, nearly the same as the 2010 sample average of 18.4 (F=.320; p=.573). The 2008 sample had an average of 3.77 credit cards while the 2010 sample reported an average of 3.06 credit cards (F=1.581; p=.212). In the two samples, 85.4% of the 2008 sample had a debit card, and 88.2% of the 2010 sample had a debit card (Chi square =.188; p=.664). The 2008 sample reported an average of 1.03 debit cards, the 2010 sample reported an average of 1.41 debit cards (F=6.458; p=.013). The 2008 sample had a mean of estimated credit-card debt of \$3,206.33 while the 2010 sample had a mean of estimated debt of \$1,565.89 (F=4.777; p=.032). The 2008 sample mean estimate of what they charged the previous month of \$463 while the mean estimate for the 2010 sample was \$299.85 (F=1.618; p=.207).

**TABLE I
COMPARISON OF DEMOGRAPHIC CHARACTERISTICS**

2008	2010	Chi Square or F test	p
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Gender	M 39%	F 61%	M 42.6%	F 57.4%	.14	.710
Age	27.85		23.91		6.47	.012
Race	C 85%	AA 7.5%	C 91.2%	AA 8.8%	5.26	.154
Marital status	S 68.3%	M 24.4%	S 85.3%	M 13.2%	5.15	.076
Income	<\$19,999	>\$19,999	<\$19,999	>19,999	15.27	.000
	50%	50%	85.1%	14.9%		
Employment	P 36.6%	F 46.3%	P 64.7%	F 16.2%	15.13	.000

In the 2008 sample, 52.5% reported that they knew the average percentage rate of their credit cards while 51.5% of the 2010 sample reported that they knew their average percentage rate (Chi square=.130; p=.937). Similarly, 57.5% of the 2008 sample reported that they knew their late payment fees on their credit card while 61.8% of the 2010 sample reported that they knew (Chi square=.288; p=.886).

Table 2 presents a comparison of how the two samples pay off their credit-card debt. The Chi-square value was 2.399, and the level of significance was .663.

**TABLE 2
COMPARISON OF CREDIT CARD PAYMENT PRACTICES**

Payment each month	2008	2010
Pay in full each month	26.8%	35.3%
Pay between the minimum and full each month	41.5%	38.2%
Pay the minimum each month	7.3%	7.4%
Pay less than the minimum each month	2.4%	0%
Not applicable	22%	19.1%

The students were also asked whether or not their credit-card debt has changed in the last six months. Table 3 presents the results comparing the two samples.

**TABLE 3
COMPARISON OF CHANGES IN CREDIT CARD DEBT**

	No debt	Increased	Stayed same	Decreased	Chi square	Sig.
2008	31.7%	17.1%	22.0%	29.3%	2.478	.479
2010	44.1%	10.3%	23.5%	22.1%		

Table 4 presents a comparison of how often the two samples used their credit cards (Chi square=1.966; p=.854). The students who did not have a credit card were part of the sample, but their results are not presented in the table.

**TABLE 4
COMPARISON OF FREQUENCY OF CREDIT CARD USE**

Sample	None	1-3	4-7	7-10	10+
2008	4.9%	29.3%	17.1%	7.3%	19.5%
2010	6.0%	40.3%	14.9%	4.5%	13.4%

Table 5 presents a comparison of how often the two samples used their debit cards (Chi square =11.466; p=.043). The students who did not have a debit card were part of the sample, but their results are not presented in the table. Half of the students in the 2010 sample used their debit cards ten or more times while less than a third of the 2008 sample used their debit cards with the same frequency.

TABLE 5

COMPARISON OF FREQUENCY OF DEBIT CARD USE

Sample	None	1-3	4-7	7-10	10+
2008	2.4%	29.3%	4.9%	19.5%	29.3%
2010	2.9%	7.4%	8.8%	20.6%	50.0%

Table 6 presents the results of t-tests between the two samples on a series of attitude statements about credit and debit cards. The scales were five-point scales, and the numbers were labeled with strongly disagree (1), disagree (2), neutral (3), agree (4) and strongly agree (5). Only one significant difference was found and it referred to how students felt about how easy it was to overspend with a credit card with the 2010 students rating it significantly higher.

**TABLE 6
COMPARISON OF ATTITUDE STATEMENT RESPONSES**

Statement	2008 Mean	2010 Mean	t	Sig.
Acceptable to borrow money for school expenses.	4.07	4.30	1.10	.273
Acceptable to borrow money to cover living expenses.	3.20	3.50	1.24	.218
Acceptable to borrow money to purchase luxury items.	2.30	2.13	.76	.448
Credit cards are safe and risk free.	1.65	1.71	.33	.743
The cost of using credit cards is too high.	3.67	3.71	.17	.867
Too easy to overspend with a credit card.	4.00	4.40	1.97	.052
Credit cards should only be used in an emergency.	3.42	3.49	.28	.777
Debit cards provide a needed service.	4.03	4.12	.47	.642
Fear consequences of overspending with a debit card.	3.03	2.96	.25	.806
I am in control of my money.	4.15	4.32	.92	.362
I have financial goals that I am working towards.	4.34	4.50	.97	.336
I understand the way I spend money to make a budget.	3.90	4.21	1.54	.127
I prefer using my debit card for majority of purchases.	3.41	3.74	1.07	.286

DISCUSSION

What a difference two years can make in credit-card usage among students. The results suggest that the two samples used in this research were quite similar in many ways, but that important changes seem to have taken place in the way students use credit cards. Credit-card and debit-card use has changed, arguably due at least in part to the seriousness of the current economic environment. While the students did have the same number of credit cards and received them at the same age, the way that they are using their credit card seems to have changed significantly. The average amount of credit-card debt has dropped by almost half when comparing the two samples and the amount that they charge per month has decreased by one-third.

Students' knowledge about their credit cards were similar across the two samples, and while one-quarter of the 2008 sample reported paying off their credit cards each month, one-third of the 2010 reported paying off their credit cards each month. The 2008 reported more increased use of their credit cards than the 2010 sample, and the 2008 sample reported using their credit cards more frequently than the 2010 sample. Debit cards and their usage was where the most differences were noted. While 50 percent of the 2010 sample reported using their debit cards ten or more times per month, less than a third of the 2008 sample reported the same usage.

Attitudes toward credit cards appeared to be slightly more negative among the 2010 sample compared to the 2008 sample with the 2010 sample agreeing significantly more than the 2008 sample that it is too easy

to overspend with a credit card. It is quite possible that the recession headlines and the downward spiral of the economy have made students more cautious of the debt that they incur in college.

On balance, then, it seems that, at least in our sample, students' use of credit cards has become more prudent and judicious. Students use their credit cards less frequently, carry lower balances and seem more likely to pay off their cards in full each month. In contrast, the use of debit cards seems to have increased significantly in the same two year time period. This may reflect a shift to a "pay as you go" strategy on the part of students, a logical complement to the decreased use of credit cards. This may also suggest that students' perception of credit card debt has changed as well. The perception of credit card debt as transitory, as noted by Norvilitis, Szablicki and Wilson (2003), may be changing.

LIMITATIONS

As with all research, there are certain limitations which must be noted. First, both samples were drawn from business students at the same college. However, there are important differences in the two samples that may contribute the results reported here. As summarized in Table 1 the 2008 sample was older, with a higher income, and with a significantly higher percentage of students working full time compared to the 2010 sample. These differences suggest different stages in the economic lives of the two samples. Consequently, our results should be interpreted with caution.

A second limitation arises from the nature of the students who attend the college from which the samples were drawn. The college and university are in an economically depressed traditional blue collar area. Most students assume some of the cost of their education and many are first generation college students. These students are less likely to believe that their current economic condition is transitory and less likely to use credit card debt to maintain a lifestyle that was provided for them in the past (Davies and Lea 1995). Consequently, our results may accurately represent the perceptions and practices of specific types of college students, and not others.

REFERENCES

- Borden, L. M., Lee, S., Serido, J., and Collins, D. (2008), "Changing College Students' Financial Knowledge, Attitudes, and Behavior through Seminar Participation," *Journal of Family and Economic Issues*, Volume 29, 23-40.
- Brandon, E. (2007), "How to Teach Your Kids about Credit Cards," *U.S. News and World Report*, from <http://www.usnews.com/mpney/personal-finance/articles/2007/12/24/how-to-teach-your-ki...>
- Chu, Kathy, (2006 and 2008), *USA Today*, "Credit cards go after college students."
- College Board (2010), "A Credit or Debit Card for Your College Student?" from <http://www.collegeboard.com/parents/apply/sending-kids-college/36818.html>
- Davies, E. and Lea, S. E. G. (1995), "Student Attitudes to Student Debt," *Journal of Economic Psychology*, Volume 16, 663-679.
- Hayhoe, C. R., Leach, L. Allen, M. W., and Edwards, R. (2005), "Credit Cards Held by College Students," *Financial Counseling and Planning*, Volume 16, Number 1 from <http://www.afcpe.org/publications/journal-articles.php?volume=103...1>
- Hayhoe, C. R., Leach, L., and Turner, P. E. (1999), "Discriminating the Number of Credit Cards Held by College Students Using Credit and Money Attitudes," *Journal of Economic Psychology*, Volume 20, 643-656.

- Jones J. E. (2005), "College Students' Knowledge and Use of Credit," *Financial Counseling and Planning*, Volume 16, Number 2, 9-16.
- Joo, S., Grable, J. E., and Bagwell, D. C. (2003), "Credit Card Attitudes and Behaviors of College Students," *College Student Journal*, Volume 37, Number 3, 405-419.
- Kenner, J., Mize, L., Gilbert, P., and Saracino, M. (2001), "University Students' Knowledge of Credit and Credit Card Usage," *Family Economics and Resource Management Biennial 2001*, 76.
- Lyons, A. C., Palmer, L., Jayaratne, K. S. U., and Scherpf, E. (2006), "Are We Making the Grade? A National Overview of Financial Education and Program Evaluation," *The Journal of Consumer Affairs*, Volume 40, Number 2, 208-235.
- Mansfield, P. M., Pinto, M. B., and Parente, D. H. (2003), "Self Control and Credit-Card Use among College Students," *Psychological Reports*, Volume 92, 1067-1078.
- McCall, M. and Eckrich, D. W. (2006), "Sex of Respondent and Credit Attitudes as Predictors of Credit Card Use and Dept Payment," *Psychological Reports*, Volume 98, 892-894.
- Nellie Mae (2005), "Undergraduate Students and Credit Cards in 2004: An Analysis of Usage Rates and Trends," from http://nelliemae.com/library/research_12.html
- Norvilitis, J. M., Szablicki, P. B., and Wilson, S. D. (2003), "Factors Influencing Levels of Credit-Card Debt in College Students," *Journal of Applied Social Psychology*, Volume 33, Number 5, 935-947.
- O'Shaughnessy, L. (2010), "The No. 1 alternative to Student Credit Cards," from <http://moneywatch.bnet.com/saving-money/blog/college-solution/the-no-1-alternative-to-stu...>
- Palmer, K (2007), "Credit Trends: Fewer Cards, Less Debt," *U.S. News and World Report*, from <http://www.usnews.com/money/personal-finance/articles/2007/12/24/credit-trends-fewer-c...>
- Pinto, M. B., Parente, D. H., and Palmer, T. S. (2000), "Materialism and Credit Card Use by Collage Students," *Psychological Reports*, Volume 86, 634-652.
- Pinto, M. B., Mansfield, P. M., and Parente, D. H. (2004), "Relationship of Credit Attitude and Debt to Self-Esteem and Locus of Control in College-Age Consumers," *Psychological Reports*, Volume 94, 1405-1418.
- Pratt, B. (2008), "Money 101: Five Tips for College Students," *Credit & Debt*, from http://www.youngmoney.com/credit_basics/Five_tips
- Richter, J. and Prawitz, A. D. (2010), "Attitudes of College Students toward Credit Cards: A Comparison of Credit Card User Types," from www.mrupured.myweb.uga.edu/.../credit_card_study_poster_abstract_EFERMA_2010_F1.pdf
- Robb, C. A. and Sharpe, D. L. (2009), "Effect of Personal Financial Knowledge on College Students' Credit Card Behavior," *Journal of financial counseling and Planning*, Volume 20, Number 1, 25-39.

- Roberts, J. A. and Jones, E. (2001), "Money Attitudes, Credit Card Use, and Compulsive Buying among American College Students, *The Journal of Consumer Affairs*, Volume 35, Number 2, 213-240.
- Susswein, R. (1995), "College Students and Credit Cards: A Privilege Earned?" *Credit World*, Volume 83, 21-23.
- Tan, David L. (2003), "Oklahoma College Student Credit Card Study," Center for Student Affairs Research, University of Oklahoma, October.
- Warwick, J. and Mansfield, P. (2000), "Credit Card Consumers: College Students' Knowledge and Attitude," *Journal of Consumer Marketing*, Volume 17, Number 7, 617-626.