Overdraft Frequency and Payday Borrowing

An analysis of characteristics associated with overdrafters

Overview

According to an analysis of banks' account data published by the Consumer Financial Protection Bureau in July 2014, "a relatively small number of account holders are responsible for most overdrafts." (Specifically, the report found, 8.3 percent of account holders who overdraw more than 10 times per year are responsible for 73.7 percent of overdraft fees.[1]) A 2008 study by the Federal Deposit Insurance Corp. came to similar conclusions.[2] This brief builds on this evidence base by analyzing Pew survey data from 2013 to compare the experiences and characteristics of "high-frequency" and "low-frequency" overdrafters, as well as the relationship of overdraft to use of payday loans.

Pew research has found that 10 percent of U.S. adults have overdrawn their checking accounts using their debit card in the preceding year.[3] Approximately 6 percent are low-frequency overdrafters—those who paid one to three overdraft penalty fees using their debit/ATM card over that year—and 4 percent are high-frequency overdrafters, having paid four or more such fees in the same period.

Among the key findings of this analysis:

- The last time each group incurred fees for a negative checking account balance, high-frequency overdrafters paid nearly twice as much as low-frequency overdrafters.
- Payday borrowers are more likely than nonborrowers to overdraw with their debit cards: About 12 percent of payday customers are low-frequency overdrafters and about 9 percent are high-frequency, compared with 6 percent and 4 percent, respectively, of the general population.
- Nearly one-quarter of low-frequency overdrafters and one-third of high-frequency overdrafters closed a checking account in response to overdraft fees, illustrating the need for new overdraft rules that apply to all customers.

Overdraft frequency and the overdraft experience

By definition, high-frequency overdrafters incurred more overdraft penalty fees in the past year (14 on average) than did low-frequency overdrafters (two on average).[4] However, when comparing only their most recent overdraft, other differences between these two groups emerge. (See Table 1.) One notable distinction is the average amount an overdraft event costs each group. High-frequency overdrafters paid an average of $95 in total overdraft fees the last time they had a negative balance caused by a debit card transaction, while low-frequency overdrafters paid $51 in total fees.

It is likely that this cost difference is largely attributable to high-frequency overdrafters paying multiple penalty fees for a single overdraft occurrence, although the survey did not collect data on the number of fees consumers paid for an individual overdraft event. Additional fees that are charged to borrowers who have a negative balance for an extended period probably play a role as well in explaining this difference; 32 percent of high-frequency overdrafters report having paid such a fee, compared with 19 percent of low-frequency overdrafters.

Table 1

Differences Between Low- and High-Frequency Overdrafters

Comparison points by percentage of customers and statistical significance

The percentage of customers who ...	Low-frequency overdrafters	High-frequency overdrafters
regained a positive balance the same day*	39%	21%
closed a checking account in response to overdraft fees	26%	32%
paid an extended overdraft fee*	19%	32%
discontinued the overdraft program in response to overdraft fees	17%	22%
incurred an overdraft with a transaction of $50 or less	67%	59%
discovered the overdraft(s) the same day or the day after	47%	43%
were warned by their financial institution before overdrawing	15%	16%

* Significant difference between low- and high-frequency overdrafters at the 95 percent confidence level.

Note: Results are based on 671 overdrafters charged a fee in the past year.

Overdraft frequency and income

Consumers with household income of $100,000 or more are less likely to overdraw when using their debit cards than are those with lower income.[5] This holds true for both high- and low-frequency overdrafters. Table 2 explores the frequency of overdrafts between households with annual income of less than $100,000 compared with households of $100,000 or more, without controlling for other variables.[6] The analysis considers only income and does not account for other factors that could change the strength and significance of the correlation.

Account holders with annual household income below $50,000—about 48 percent of American households, according to the U.S. Census Bureau—are more than twice as likely to overdraw as are account holders with annual household income of $100,000 or more.[7] It is important to note that having lower household income does not necessarily cause more overdrafts.

Table 2

Lower Household Income Correlates With a Higher Likelihood of Overdrafts

Increased likelihood of being an overdrafter, by type and income, as compared with account holders with income of $100,000 or more

	Compared with account holders with $100,000 or more in annual household income, the increased likelihood of being ...		
Household income bracket	**an overdrafter**	**a low-frequency overdrafter**	**a high-frequency overdrafter**
Less than $25,000	157%*	200%*	113%*
$25,000-$49,999	163%*	202%*	123%*
$50,000-$74,999	109%*	153%*	64%
$75,000-$99,999	40%	70%	10%

* Significant relationship at the 95 percent confidence level.

> High-frequency overdrafters paid an average of $95 in total overdraft fees the last time they had a negative balance caused by a debit card transaction, while low-frequency overdrafters paid $51 in total fees.

Overdraft frequency and payday loan use

Table 3 shows that consumers who take out payday loans are more than twice as likely as nonborrowers to overdraw with their debit cards.[8] Payday loan customers are equally likely to be high- or low-frequency overdrafters. Pew examined these behaviors without controlling for any variables other than payday borrowing. As was the case in Table 2, the strength and significance of this correlation probably depend on other factors and could change once other factors are taken into account. Notably, this analysis cannot conclude whether payday borrowing causes overdrafts or vice versa, but it is clear that the same consumers are using the two products. Pew research has shown that most payday borrowers end up paying fees for both products, demonstrating that payday loans do not eliminate the risk of overdrawing.[9] In fact, more than half of payday loan customers have overdrawn in the past year. In addition, more than a quarter of payday loan customers report that overdrafts occurred as a result of a payday lender making a withdrawal from their account.

Table 3

Payday Loans Correlate With Overdrafting

Borrowers' increased likelihood of overdrawing, by type, compared with nonborrowers

Compared with account holders without a payday loan, the increased likelihood of being ...		
an overdrafter	**a low-frequency overdrafter**	**a high-frequency overdrafter**
144%	143%	146%

Notes: All percentages are significant at the 95 percent confidence level. This analysis identifies payday borrowers by their answers to the question, "Do you currently have ... a short-term loan, such as a payday loan, or not?"

Payday Loans

As part of its 2013 survey of checking account customers, Pew interviewed 111 payday loan borrowers, about 5 percent of the total survey sample. Based upon their responses and without considering other variables, payday borrowers are more likely than nonborrowers to overdraw with their debit cards. About 12 percent are low-frequency and about 9 percent are high-frequency, compared with 6 percent and 4 percent, respectively, of the general population.

Though the total number of payday loan users is small, they are more likely than nonborrowers of payday loans to have overdrawn their checking account at an ATM or point of sale when accounting for other demographic and financial characteristics, such as gender, race, age, homeownership, marital status, education, employment, income, other financial products, and current military service (high-cost payday loans cannot be offered to military personnel under the Military Lending Act). (See Appendix B for details on all the variables considered.) The relationship is statistically significant at the 95 percent confidence level. In fact, having overdrawn is the only statistically significant variable at the 95 percent level. It should be noted that because the sample of payday loan customers is small, further study with a larger sample would be likely to produce stronger significance among some of the other closely correlated variables such as age, gender, homeownership, education, and lack of access to other financial credit products, such as credit cards.

Pew's small-dollar loans project has analyzed payday loan consumers extensively and offered policy solutions to the fundamental problems in the payday loan market. (Visit pewtrusts.org/small-loans.)

Profile of overdrafters

Table 4 highlights characteristics correlated with overdrafts.[11] Additionally, as account holders age, they become more likely to overdraw until age 32, at which point their likelihood of overdrawing begins to decline. None of these characteristics should be understood to cause overdrafting or overdrafts in general.

Table 4

Factors That Correlate With a Respondent's Likelihood to Overdraw

Increased likelihood of being an overdrafter, compared with consumers who do not share the characteristic

Account holders who ...	have an increased likelihood of overdrawing of ...
have a payday loan	102%
are nonwhite (includes white Hispanics)	66%
are employed (full- or part-time)	62%
have a checking account at a bank (as opposed to a credit union)	60%
do not have a line of credit	50%

Notes: These characteristics are significant at the 95 percent confidence level. As opposed to the simple logistic regressions in Tables 2 and 3, this model accounts for several factors, which might influence an account holder's likelihood of overdrawing. See the methodology and Appendix A for a complete discussion of this model and the variables considered.

Difference between low- and high-frequency overdrafters

To determine whether fundamental differences exist between the characteristics of low- and high-frequency overdrafters, Pew compared the two groups using the model shown in Table 4. The only statistically significant difference found related to geographic region: Low-frequency overdrafters are more likely than high-frequency overdrafters to live in the Midwest at the 90 percent confidence level.[12]

Conclusion

Previous Pew research has demonstrated the negative impact of overdrafts on checking account consumers. For example, more than one-quarter (28 percent) of all overdrafters say they had closed a checking account because of overdrafts; almost one-fifth (19 percent) say they had inquired about discontinuing overdraft service in response to fees; and 13 percent report that they no longer had a checking account.[13] The analysis presented here reveals that low- and high-frequency overdrafters experience the same types of undesirable outcomes after running into problems with overdraft fees and are not fundamentally different in terms of their demographic and socioeconomic makeup. Therefore, public policy solutions should target overdraft as a whole, rather than focusing on only a subset of overdrafters.

Furthermore, payday borrowing is strongly correlated with debit/ATM and point-of-sale overdraft. Payday borrowers are 144 percent more likely to overdraw than nonborrowers and, when other factors are considered, remain 102 percent more likely to overdraw than nonborrowers. This analysis cannot determine a causal relationship between payday borrowing and overdraft, but it is clear that the two products are often used by the same customers. As Pew's previous research has shown, having a payday loan does not eliminate the risk of checking account overdraft and in fact is often the cause of an overdraft, so that borrowers end up paying for both the loan and the overdraft.[14]

Participating in the banking system allows consumers to save more and helps them to weather economic storms.[15] Yet too often, the outcome for those who, either frequently or infrequently, overdraw with their debit card, is the same—they leave the banking system voluntarily or involuntarily. Thus, rules that limit the harm of overdraft need to apply to all consumers and not just to those who incur the most fees. The Consumer Financial Protection Bureau should write broad rules to ensure that checking accounts are safe and transparent products for all consumers by limiting overdraft fees and prohibiting bank practices that increase them.

Methodology

Pew commissioned Social Science Research Solutions to conduct a survey of consumers who paid debit card overdraft penalty fees, paid overdraft transfer fees, had transactions declined at no cost, or never attempted to spend more money than was in their accounts in the preceding year. Interviews were conducted from Oct. 30 to Dec. 15, 2013, with a nationally representative sample of 8,042 respondents 18 and older. The sample was a fully replicated, stratified, single-stage, random-digit-dialing sample of telephone households and randomly generated cellphones. Within each sampled household, a single respondent was randomly selected. Of the 8,042 respondents, 3,227 were reached on cellphones, and 129 were contacted in Spanish.

Appendix A

The following table contains all of the variables collected in the 2013 survey that were considered when developing profiles of overdrafters.

Variables Considered in Low- and High-Frequency Overdrafter Models

Variable name	Type of variable	Description of variable
Region	Categorical	Region of residence in the United States—Northeast/Midwest/South/West (reference category for model is Northeast)
Female	Dummy	Respondent is female
Nonwhite (includes white Hispanic)	Dummy	Respondent is not white or is white Hispanic
Age	Continuous	Age in years
Age^2	Continuous	Age in years squared
Renter	Dummy	Respondent rents his or her home
Single (widowed, divorced, or never married)	Dummy	Respondent is single (reference category for model is partnered, which includes married or cohabitating)
No college degree	Dummy	Respondent has no college degree (reference category for model is a four-year college degree or greater)
Employed (full- or part-time)	Dummy	Respondent is employed on a full- or part-time basis (reference category for model is unemployed, which includes retired, student, homemaker, and disabled)
Not a military family	Dummy	Respondent, respondent's spouse, or respondent's dependent is currently not a member of the armed services
Household income of less than $50,000	Dummy	Household income less than $50,000
Does not have a savings account at the same institution as his or her checking account	Dummy	Respondent does not have a savings account at the same institution where he or she has checking account

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Variable name	Type of variable	Description of variable
Does not have a general purpose reloadable prepaid card	Dummy	Respondent does not have a general purpose reloadable prepaid card
Does not have a credit card	Dummy	Respondent does not have a credit card with which to borrow money
Does not have a line of credit	Dummy	Respondent does not have a line of credit with which to borrow money
Has a payday loan	Dummy	Respondent has a short-term loan, such as a payday loan
Primary checking account institution is a bank	Dummy	Respondent's most frequently used checking account is at a bank rather than a credit union

Appendix B

The following table contains all of the variables from the 2013 survey that were considered when examining payday loan use.

Variables Considered in Payday Models

Variable name	Type of variable	Description of variable
Has overdrawn	Dummy	Respondent has overdrawn his or her checking account
Female	Dummy	Respondent is female
Nonwhite (includes white Hispanic)	Dummy	Respondent is not white or is white Hispanic
Age	Continuous	Age in years
Age^2	Continuous	Age in years squared
Renter	Dummy	Respondent rents his or her home
Single (widowed, divorced, or never married)	Dummy	Respondent is unmarried (reference category for model is partnered, which includes married or cohabitating)

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Variable name	Type of variable	Description of variable
No college degree	Dummy	Respondent has no college degree (reference category for model is a four-year college degree or greater)
Employed (full- or part-time)	Dummy	Respondent is employed on a full- or part-time basis (reference category for model is unemployed, which includes retired, student, homemaker, and disabled)
Not a military family	Dummy	Respondent, respondent's spouse, or respondent's dependent is currently not a member of the armed services
Household income of less than $25,000	Dummy	Household income less than $25,000
Does not have a savings account	Dummy	Respondent does not have a savings account at the same institution where he or she has checking account
Does not have a credit card	Dummy	Respondent does not have a credit card with which to borrow money
Does not have a line of credit	Dummy	Respondent does not have a line of credit with which to borrow money

Endnotes

1 Consumer Financial Protection Bureau, "Data Point: Checking Account Overdraft" (July 2014), 11, http://files.consumerfinance.gov/f/201407_cfpb_report_data-point_overdrafts.pdf.

2 Federal Deposit Insurance Corp., *FDIC Study of Bank Overdraft Programs* (November 2008), 76, https://www.fdic.gov/bank/analytical/overdraft/FDIC138_Report_Final_v508.pdf.

3 The Pew Charitable Trusts, *Overdrawn: Persistent Confusion and Concern About Bank Overdraft Practices* (June 2014), 1, http://www.pewtrusts.org/~/media/Assets/2014/06/26/Safe_Checking_Overdraft_Survey_Report.pdf. The overdrafters in the report and this issue brief are checking account holders who paid a penalty fee for overdrawing their account with a debit card at an ATM or the point of sale. Those who had an overdraft penalty fee waived, had overdrawn by a check or Automated Clearing House (ACH) transaction, or had their negative balance covered by an overdraft transfer program are not included in this analysis.

4 By definition, low- and high-frequency overdrafters must have incurred a negative balance and paid an overdraft penalty fee. Those who had an overdraft penalty fee waived, had overdrawn by a check or ACH transaction, or had their negative balance covered by an overdraft transfer program are not included in these groups.

5 The Pew Charitable Trusts, *Overdrawn*, 3.

6 Three logistic regression models using 2013 survey data were run in which income category was the independent variable. The dependent variable in the first model was being an overdrafter, in the second model it was being a low-frequency overdrafter, and in the third model it was being a high-frequency overdrafter. Low-frequency overdrafters are excluded from the reference category when analyzing the relationship between high-frequency overdrafters and income. In all three models, the reference category consists only of nonoverdrafters. Pairwise deletion was used to account for missing values. Resulting odds ratios are shown.

7 Population data from U.S. Census Bureau, *American Community Survey, 2011–2013 American Community Survey 3-Year Estimates, Table DP03*, accessed December 2014, http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_13_3YR_DP03&prodType=table.

8 Three logistic regression models using 2013 survey data were run in which being a current small-dollar loan borrower was the independent variable. The dependent variable in the first model was being an overdrafter, in the second model it was being a low-frequency overdrafter, and in the third model it was being a high-frequency overdrafter. In all three models, the reference category consists only of nonoverdrafters. Pairwise deletion was used to account for missing values. Resulting odds ratios are shown.

9 The Pew Charitable Trusts, *Payday Lending in America, Report 2: How Borrowers Choose and Repay Payday Loans* (February 2013), 32–35, http://www.pewtrusts.org/~/media/Assets/2013/02/20/Pew_Choosing_Borrowing_Payday_Feb2013-(1).pdf.

10 These respondents answered yes to the question, "Do you currently have … a short-term loan, such as a payday loan, or not?"

11 A logistic regression model using 2013 survey data was run on an overdraft penalty dummy variable (whether a consumer had incurred an overdraft penalty fee in the preceding 12 months). The model included a continuous independent variable for age as well as a continuous age^2 variable and independent dummy variables for geographic region, race, sex, income, homeowner status, marital status, employment status, education status, military family status, possession of a credit card, possession of a line of credit, possession of a payday loan, possession of a savings account at the same institution as one's checking account, and whether one's primary checking account was with a bank or credit union. Pairwise deletion was used to account for missing values.

12 U.S. Census Bureau, Census Regions and Divisions of the United States, https://www.census.gov/geo/maps-data/maps/pdfs/reference/us_regdiv.pdf. The U.S. Census Bureau defines the Midwest to include Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

13 The Pew Charitable Trusts, *Overdrawn*, 1, 10.

14 The Pew Charitable Trusts, *Payday Lending in America, Report 2*, 32–35.

15 The Pew Charitable Trusts, *Slipping Behind: Low-Income Los Angeles Households Drift Further From the Financial Mainstream* (October 2011), 13, http://www.pewtrusts.org/~/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/safe_banking_opportunities_project/Slipping20Behindpdf.pdf.

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