

JUNE 2013

# CFPB Study of Overdraft Programs

A white paper of initial data findings



Consumer Financial  
Protection Bureau

# Table of Contents

<b>Executive Summary .....</b>	<b>4</b>
<b>1. Introduction .....</b>	<b>8</b>
<b>2. Market and Regulatory Context of Overdraft Programs .....</b>	<b>10</b>
<b>3. Consumer Overdraft Incidence, Fees, and Related Account Closure.....</b>	<b>20</b>
<b>3.1 Overdraft and NSF Incidence .....</b>	<b>21</b>
<b>3.2 Overdraft and NSF Fees.....</b>	<b>22</b>
<b>3.3 Account Closure .....</b>	<b>24</b>
<b>3.4 Paid vs. Returned Overdraft Items .....</b>	<b>26</b>
<b>4. Overdraft Use Following the 2010 Opt-In Requirement Under Regulation E .....</b>	<b>27</b>
<b>4.1 Overview of Regulatory Changes .....</b>	<b>28</b>
<b>4.2 Variations in Implementation Approaches .....</b>	<b>28</b>
<b>4.3 Opt-In Rates.....</b>	<b>29</b>
<b>4.4 Variations in Opt-In Rates by Bank.....</b>	<b>31</b>
<b>4.5 The Impacts of Opting In and Not Opting In .....</b>	<b>33</b>
<b>4.6 Variation in the Changes in NSF/OD Incidence .....</b>	<b>39</b>
<b>5. Overdraft Policies and Practices across Institutions .....</b>	<b>41</b>

5.1	Calculating Available Funds.....	42
5.2	Transaction Processing and Posting Orders.....	44
5.3	Overdraft Coverage Limits and Making Pay/Return Decisions.....	48
5.4	Charge/No-Charge Decisions, Waivers, and Refunds.....	52
5.5	Linked Account Overdraft Protection, Alerts, and Other Programs to Limit Overdrafts.....	54
5.6	Accountholder Behavioral Characteristics and Screening Policies.....	58
<b>6.</b>	<b>Conclusion, Open Questions, and Further Research Steps .....</b>	<b>60</b>
	<b>Glossary .....</b>	<b>64</b>
	<b>Notes.....</b>	<b>69</b>

# Executive Summary

In February 2012, the Consumer Financial Protection Bureau (CFPB) initiated a broad inquiry into financial institutions' overdraft programs for consumer checking accounts. This effort included a public Request for Information (RFI) and a detailed study of overdraft programs at a small set of large banks that are supervised by the CFPB. These banks provide a significant portion of all U.S. consumer checking accounts. Through the CFPB's supervision program, these banks have provided institution-level information about their overdraft programs and accounts during 2010 and 2011.

Many of the concerns that motivated the CFPB's inquiry are not new. In response to growing costs to consumers, federal agencies have addressed these issues in different ways at different times, which industry has recognized.<sup>a</sup> Our review is intended to provide the factual basis to inform efforts to develop more uniform treatment of these issues across financial institutions.

This paper summarizes initial findings from our inquiry. It draws principally on the institution-level information received from banks participating in the study, as well as responses to the RFI and other industry sources. These findings indicate that overdraft programs can be costly for the consumers who use them, and that both consumer outcomes and policies related to overdraft programs can vary considerably across banks. Specifically:

- **Costly service:** The banks in the study used different methodologies for measuring the incidence of accounts that incurred overdraft and non-sufficient funds (NSF) fees. The percentage of accounts experiencing at least one overdraft or NSF transaction in 2011 was 27% for study banks that tracked all incidences for all

---

<sup>a</sup> See American Bankers Association letter to Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, Federal Reserve Board of Governors, and CFPB (August 24, 2011), available at <http://www.aba.com/aba/documents/news/OverdraftLetter82511.pdf>.

accounts opened at any time during 2011 and 20% for study banks utilizing other methods. The average overdraft- and NSF-related fees paid by all study bank accounts that had one or more overdraft transactions in 2011 was \$225 and varied by as much as \$201 between study banks.

- **Heavy overdrafters:** A small percentage of consumer checking accounts incur a substantial number of overdrafts. The proportion of consumer checking accounts with at least one overdraft or NSF that were heavy overdrafters (defined for purposes of this paper as consumers incurring more than 10 non-sufficient funds or overdraft transactions during 2011) was 27.8% for study banks that tracked all incidences for all accounts opened at any time during 2011 and 13.5% for other study banks.
- **Involuntary account closures:** Some banks close consumer checking accounts at significant rates, mostly due to unpaid negative balances. Study banks involuntarily closed 6.0% of consumer checking accounts that were open or opened during 2011. Involuntary closure rates varied widely; the study bank with the highest involuntary rate closed 14 times more of its accounts in 2011 than the bank with the lowest involuntary closure rate. While not all negative balances are caused by overdraft, the majority of negative balance incidents result when consumers overdraw their accounts.
- **Implementation of the opt-in requirement on overdraft coverage of ATM and POS debit card transactions:** A 2009 Federal Reserve Board amendment to Regulation E (subsequently recodified by the CFPB) requires accountholders to provide affirmative consent (opt in) for overdraft coverage of automated teller machine (ATM) and non-recurring point of sale (POS) debit card transactions before banks can charge for paying such transactions. This change became effective for new accounts on July 1, 2010, and for existing accounts on August 15, 2010. The share of accounts that had opted in to ATM/POS debit card coverage at the end of 2011 varied by 18 percentage points across study banks. Opt-in rates among the study banks of accounts that were opened during 2011 were generally higher than for existing accounts and varied dramatically, ranging from single-digit percentages to more than 40%.
- **Overdrafters who did and did not opt in:** Consumers' overdraft experiences before and after the implementation of the opt-in requirement provide some insight

into the impact of the new opt-in requirement. While a majority of accounts that were the heaviest overdrafters (with more than 10 overdraft or NSF transactions in the first half of 2010) did not opt in, these accountholders opted in at a higher rate than accounts overall (44.7% compared to 15.2% of all accountholders among the sample of banks). While both heavy overdrafters who did and did not opt in experienced a reduction in fees per account in the second half of 2010, the reduction in fees for those who did not opt in was \$347 greater, on average, than for those who did opt in.

- **Variations in overdraft-related practices and policies:** Numerous bank policies can affect when a transaction might overdraw a consumer's account and whether or not the consumer would be charged a fee. These include, among others:
  - when banks provide funds availability on deposits;
  - how banks treat holds on funds in connection with debit card transaction authorizations;
  - what transaction posting orders banks use;
  - how banks set overdraft coverage limits (the amounts by which consumers are permitted to overdraw their accounts) and at what levels;
  - whether banks offer waivers or delays in assessing overdraft fees to accounts for *de minimis* transactions or short negative balance periods; and
  - whether and how banks charge additional fees for extended or sustained negative balances.

In addition, several other bank policies may influence consumer outcomes with respect to overdraft programs including how banks promote enrollment in automatic transfers from linked deposit accounts or credit lines to avoid overdrafts, how banks screen new account applicants, and other policies influencing the characteristics of accountholders across banks.

These practices and policies, among others, varied significantly (and in some cases, dramatically) among study banks. For example, the percentage of accounts enrolled in overdraft protection programs involving automatic transfers from linked personal deposit accounts

ranged by close to 40 percentage points across study banks. Likewise, study banks used a variety of transaction posting orders and employed a range of methods for setting overdraft coverage limits.

In announcing the launch of this study, CFPB Director Cordray observed that “overdrafts can provide consumers with needed access to funds.” Nothing in this report implies that banks and credit unions should be precluded from offering overdraft coverage. Moreover, our study notes progress in some areas in recent years in protecting consumers from harm. Nonetheless, our findings with respect to the number of consumers who are incurring heavy overdraft fees or account closures and the wide variations across institutions indicate that certain practices and procedures merit further analysis to determine whether they are causing the kind of consumer harm that the federal consumer protections laws are designed to prevent.

# 1. Introduction

In February 2012, the Consumer Financial Protection Bureau (CFPB) launched an inquiry into overdraft practices and their effect on consumers. In announcing that inquiry, CFPB Director Richard Cordray observed that “Overdrafts can provide consumers with access to funds, but the growing costs of overdraft practices have the capacity to inflict serious economic harm.”<sup>1</sup>

Director Cordray went on to note that there have been a number of changes in overdraft practices in recent years, some as a result of new regulatory requirements, some in response to litigation, and some undertaken voluntarily by banks, thrifts, and credit unions (collectively referred to in this paper as “financial institutions” or “institutions”). Director Cordray explained that as an agency committed to evidence-based decision-making, the CFPB needed “to know the facts and figures about all of this, and more, in order to carry out our role of protecting consumers.”<sup>2</sup>

The CFPB’s analysis of overdraft programs<sup>b</sup> relies on two principal sources of data: (1) responses to a Request for Information (RFI) published in the Federal Register<sup>3</sup> in February 2012; and (2) aggregate, institution-level information data from a sample of large banks regarding those banks’ overdraft programs coupled with detailed, de-identified account and transactional information from random samples of consumer checking accounts at these same banks.<sup>c</sup>

---

<sup>b</sup> The descriptions of overdraft programs provided in this paper reflect market research and do not imply that the CFPB has necessarily approved or critiqued any particular aspects of the features or operation of these products from a regulatory or supervisory standpoint.

<sup>c</sup> None of the data contain personally identifiable information about consumers.

The study banks are large banks covered by the CFPB’s supervisory authority and do not include credit unions, thrifts, or banks with total assets under \$10 billion. In addition to these sources, the study includes information that the CFPB gathered from, and republishes with the permission of, subscription data services. It also includes publicly available information (including program terms and policies), and information voluntarily shared with the CFPB for publication by industry vendors.

The CFPB’s Request for Information generated responses from financial institutions, consumers, industry associations, and consumer advocates on overdraft program practices and outcomes for consumers. The RFI supplements the large bank study by providing information about smaller institutions through the responses these institutions and their trade associations submitted. The large banks that provided overdraft program and transactional data for the study (referred to in this paper as “study banks”), while not representative of the market as a whole, collectively hold a substantial percentage of domestic checking deposits. These banks also maintain a large share of all U.S. depository institution branch offices and provide accounts in all 50 states.<sup>4</sup>

In this paper, we begin to address the issues raised by overdraft programs through analysis of the institution-level information provided by the study banks and the information we received in response to the RFI. As each of the study banks is subject to the CFPB’s supervisory authority, we present our analyses in a manner that preserves the confidentiality of the supervisory information upon which these analyses rely. Future analyses will draw from de-identified account-level and transaction-level data to further our study of overdraft programs.

Section 2 describes the market and regulatory context for this paper focusing on changes over time in checking account use, overdraft programs, and related regulations. Section 3 presents aggregated information about consumer outcomes with respect to overdraft incidence, fees, and account closure provided by the study banks. Section 4 explores the potential impact of changes to Regulation E, which requires a consumer’s affirmative opt-in before an institution can charge a fee for overdraft coverage on specific types of transactions. Section 5 describes the institutional operating policies and variations in pricing and overdraft program configurations that can influence consumers’ outcomes with respect to overdraft programs. Finally, Section 6 summarizes the key findings of this report and notes issues for further research and analysis.

## 2. Market and Regulatory Context of Overdraft Programs

Overdraft programs on checking accounts have evolved from a manual courtesy program to an automated feature that today generates a significant share of financial institutions' revenue from deposit accounts. Some financial institutions market overdraft programs as a service that saves customers the embarrassment and cost of rejected payments. In recent years, consumer advocates and financial regulators have scrutinized some overdraft program practices as potentially harmful to consumers, and regulators have raised safety and soundness as well as consumer protection concerns.<sup>5</sup> The published supervisory expectations of the various prudential regulators are not necessarily aligned and may be creating an unlevel playing field among depository institutions.

**Consumer Checking Account Overdrafts and Overdraft Programs:** Consumers can trigger overdraft program coverage when they attempt to spend or withdraw funds from their checking accounts in an amount exceeding the accounts' available funds.<sup>d</sup> The financial institution can then choose to either pay or reject the transaction. These decisions, once made manually at the discretion of each institution's managers, have become largely automated. Some automated overdraft programs incorporate a variety of information such as a customer's average account balance, deposit volumes, or account tenure to determine whether the institution will pay the transaction when customer funds are otherwise insufficient (*i.e.*, into overdraft). Transactions that an institution decides to pay into overdraft ("overdrafts" or "overdraft

---

<sup>d</sup> Institutions use a wide range of factors to calculate consumer account balances and to determine whether to authorize or post an attempted transaction. These factors are discussed in Section 5: Overdraft Program Policies and Practices across Institutions.

transactions”) may then incur an overdraft fee. Transactions initiated by check or ACH that the institution rejects usually generate a non-sufficient funds (NSF) fee; in contrast, institutions generally do not charge an NSF fee when declining a debit card authorization inquiry at a merchant or ATM.<sup>c</sup>

With respect to transactions that are paid into overdraft and generate a fee, institutions generally charge overdraft fees in fixed amounts rather than in proportion to the size of the payment being made. The same is true with respect to NSF fees charged on transactions that are rejected.<sup>f</sup> Some will additionally charge an extended or sustained overdraft fee if the accountholder does not make a deposit to bring the account back to a positive balance within a specified period of time after incurring an overdraft.

### **The Evolution of Checking Account Use and Automation of Overdraft Approval:**

Checking accounts are the product most consumers use to receive and deposit funds, withdraw cash, and make payments for everyday expenses and loan payments. Over the last several decades, the mechanisms available to consumers to withdraw funds or make payments from checking accounts have expanded and grown more complex.<sup>g</sup> Those changes have also created more opportunities to overdraw an account held with an institution that offers overdraft coverage.

Beginning in the mid-1970s, the advent of ATMs made it possible for consumers to withdraw cash from their accounts without visiting a branch teller line and to do so 24/7. The advent of regional, national, and global ATM networks made it possible to make cash withdrawals all over the world.

Many institutions subsequently expanded transactional capabilities by replacing ATM-only cards with debit cards that could also be used to make electronic payments to merchants and service providers from checking accounts. Debit card transaction volumes have grown quickly as the networks that enable these transactions have broadened. Acceptance by grocery stores, gas stations, and other retailers helped to drive the popularity of “online” or “PIN debit” payments

---

<sup>c</sup> See Section 4.1 for a discussion of NSF fees and declined debit card authorizations.

<sup>f</sup> The per-item charges for NSF and overdraft transactions also tend to be identical at each institution.

<sup>g</sup> These expanded transactional capabilities, such as ATMs, are available to consumers through other types of accounts, including savings accounts. Our analysis to-date and this paper, however, focus exclusively on overdrafts related to consumer checking accounts.

across regional and global ATM networks. By 1996, “offline” or “signature debit” transaction volumes overtook PIN debit payment volumes.<sup>6</sup> These debit cards offered broader merchant acceptance, including at Internet retailers. In 2006, debit card payment transaction volumes in the U.S. exceeded both check and credit card payments, and from 2006 to 2011, the total volume of U.S. consumer debit card transactions nearly doubled.<sup>7</sup>

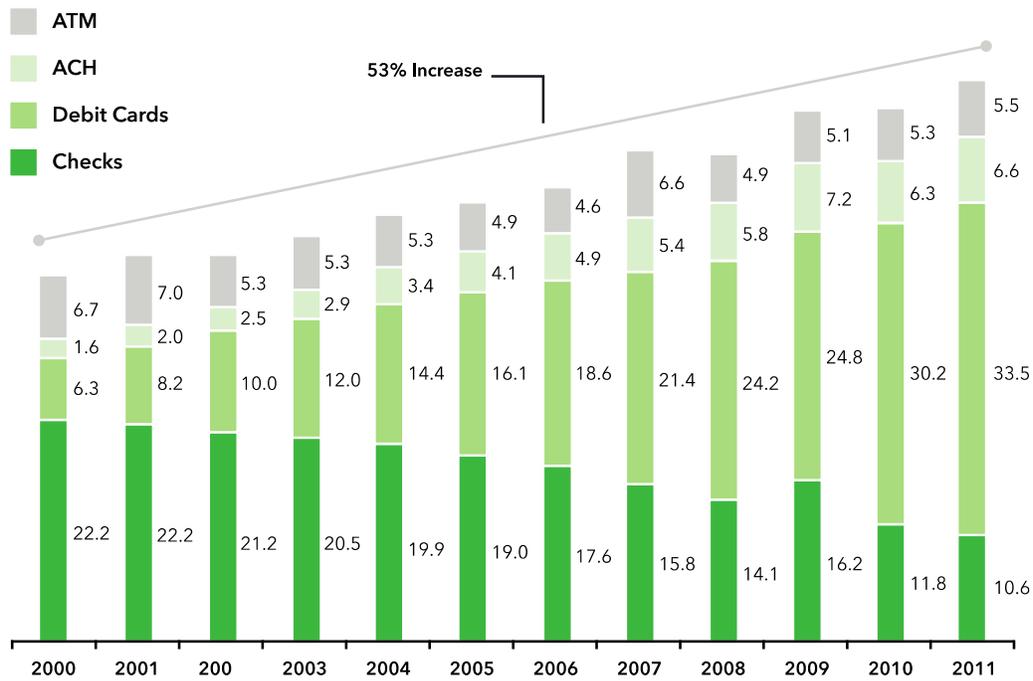
Spurred by the advent of online banking and both automated and online bill payment, consumers’ use of automated clearinghouse (ACH) networks to make electronic payments from checking accounts has also grown rapidly. Some ACH payments are “pushed”—*i.e.*, initiated by consumers through their institutions’ online or mobile banking applications—while others are “pulled” by merchants or billers that have obtained the consumer’s authorization to do so.<sup>h</sup> Consumers may authorize ACH payments to be made on a one-time or a recurring basis.

The growth in the variety of payment mechanisms tied to checking accounts helped drive increases in payment volumes and significantly expanded the types of payments to which overdraft coverage could be applied. From 2000 to 2011, the average number of monthly consumer noncash payments (including ATM withdrawals) per U.S. household increased by over 50%, from approximately 37 to 56 (see Figure 1 below). The expanded payment facilities provided consumers with new sources of convenience. At the same time, these new methods of payment increased product complexity and may have compounded the difficulty some consumers face in managing checking accounts.

---

<sup>h</sup> Additionally, merchants and financial institutions can convert checks to ACH transactions.

**FIGURE 1:** AVERAGE MONTHLY NUMBER OF CONSUMER CHECKING ACCOUNT PAYMENTS PER HOUSEHOLD (U.S.)



Sources: Nilson, Dove, Mercator, Census Bureau, GAO, CFPB Estimates

In the past, institutions determined whether or not to cover payments when customer funds were insufficient through manual or ad hoc programs in which decisions were made on a check-by-check basis when checks that consumers had written were presented for payment. However, with the advent of electronic transactions (*i.e.*, ATM withdrawals and debit card purchases) that require real-time authorization decisions, financial institutions faced the question of whether to refuse to authorize any electronic transaction for which there were insufficient funds or create an automated system of authorizing such transactions into overdraft.

In choosing the latter course, financial institutions established the concept of overdraft limits, or amounts by which the institution would allow payments to overdraw a consumer’s account without being declined authorization or returned. These limits may be static or dynamic and

may or may not vary by customer.<sup>i</sup> Regardless, institutions authorize and pay or “cover” the overdraft payments up to each account’s limit amount and return payments (or refuse to authorize electronic transactions) that would cause the account’s negative balance to exceed the limit amount. Overdraft coverage limits effectively constitute the amount an institution is willing to advance to a consumer on future deposits in return for paying per-item overdraft fees.

Today, automation of overdraft programs is common across the industry. The Federal Deposit Insurance Corporation (FDIC) found in a 2011 survey<sup>8</sup> that 70% of institutions with assets of \$38 billion or more, 54% of midsized institutions, and 32% of banks with assets less than \$1 billion employ automated overdraft programs.<sup>j</sup> A recent survey conducted in response to the CFPB’s RFI by a bank trade association to which 575 member institutions responded suggests that overdraft automation is also common at community banks, where 71% of institutions with assets over \$250 million report using some degree of overdraft automation (although an equal percentage of institutions with assets under \$100 million report having only ad hoc programs).<sup>9</sup>

**Fee Income from Overdraft and NSF Transactions:** NSF and overdraft revenues constitute a substantial share of total revenues generated by consumer checking accounts and contribute significantly to overall revenue, especially for institutions that rely most heavily on their consumer lines of business. Analysis suggests that industry revenues from NSF and overdraft fees from consumer checking accounts have increased significantly over the past several decades.

Depository institutions combine consumer checking account NSF and overdraft fee revenues with other deposit account service charges and fee income in their public reports of condition and income (Call Reports). Service charges on deposits reported by banks and thrifts, which totaled \$34.2 billion in 2012, can include dozens of types of fees levied against consumers, small businesses, large corporations, and other types of customers.<sup>10</sup> In the call report that credit unions submit to the National Credit Union Administration (NCUA), NSF and overdraft fees are combined into an even broader category that also includes fees earned on non-deposit services. The NCUA reported that fee income earned by credit unions totaled \$7.4 billion in 2012.<sup>11</sup>

---

<sup>i</sup> See Section 5 for greater detail on overdraft limits.

<sup>j</sup> The FDIC survey requested information about the availability of automated overdraft programs for the institutions’ “most basic or entry level account.” Note that the FDIC, in its report, defined automated programs as having “little to no discretion given to bank employees, and no case-by-case bank employee decision-making with respect to an individual customer or item.”

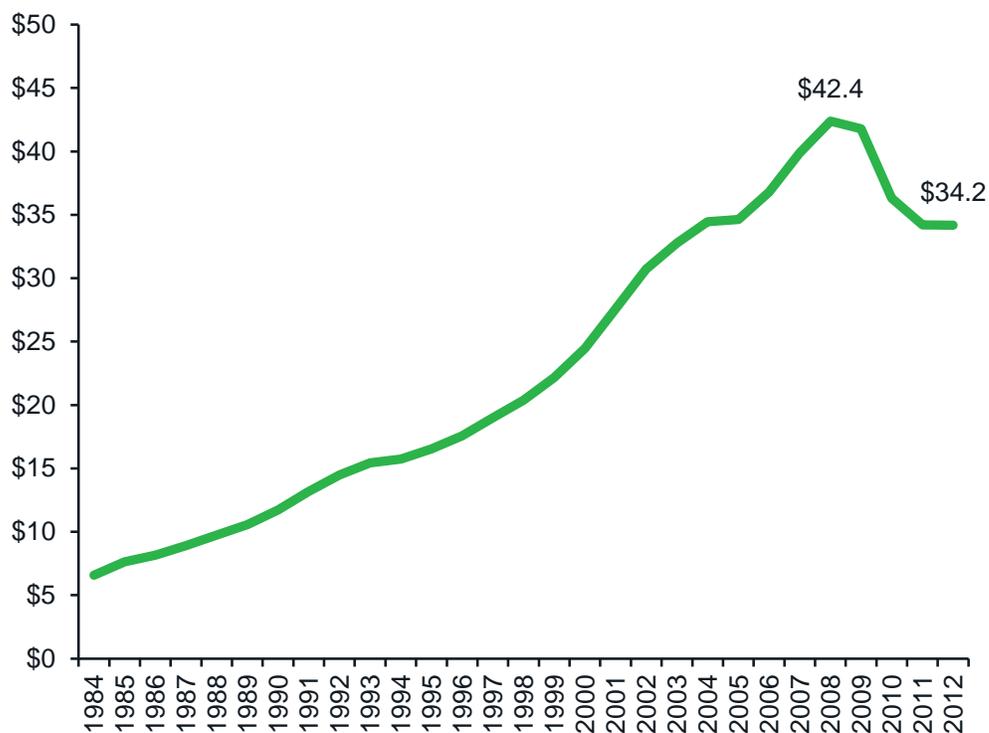
According to information supplied to the CFPB by the study banks, overdraft and NSF-related fees from consumer checking accounts constituted 61% of consumer and 37% of total deposit account service charges earned by these banks in 2011. While the composition of fee revenues varied considerably among study banks, if aggregate study bank fee revenue ratios could be extrapolated to all FDIC-insured institutions, this would imply the banking industry earned roughly \$12.6 billion in consumer NSF and overdraft fees in 2011. However, there is reason to believe that such an extrapolation would understate total industry overdraft revenue. For example, several non-study banks that provide information about their overdraft fee income in public documents report overdraft and NSF revenue ranging from 41% to 56% of total deposit account service charges in 2012.<sup>12</sup> Additionally, an industry analyst who conducts an annual survey of a large number of institutions reports that in 2012 overdraft and NSF fees totaled \$32 billion—a figure that would represent fully 77% of the deposit account services charges and fee income reflected in bank and credit union Call Reports.<sup>13</sup>

The differences between these estimates may in part be attributable to the differences between different types of financial institutions. The study banks, while representing a large share of consumer deposits, are banks serving large commercial clients as well as consumers. Smaller institutions are generally less likely to provide deposit services to large corporate clients and thus are likely to have a larger percent of their deposit service charges attributable to consumer accounts, and more specifically, to overdraft and NSF fees. For example, the FDIC estimated in a study of bank overdraft programs that among a non-random sample of banks within its supervisory jurisdiction, 74.0% of deposit account service charges in 2007 were attributable to overdraft and NSF fees.<sup>14</sup> Similarly, a bank trade association's survey of community banks found that overdraft and NSF revenue represented 62% of deposit account service charges and 27.5% of net income after taxes for its member respondents.<sup>15</sup> Furthermore, an industry vendor that services 1,800 predominantly small institutions has reported to the CFPB that NSF and overdraft revenues accounted for 78% of its community bank and thrift clients' deposit service charges and 51% of its credit union clients' fee income in 2012. The same vendor reports that 6.9% of its bank and thrift clients' 2012 operating revenues (net interest income plus noninterest income) came from NSF and overdraft revenues. The firm measures the corresponding ratio to be 11.6% for its credit union clients.<sup>16</sup>

Given these multiple data points, it is not currently possible to determine with precision the dollar volume of overdraft and NSF fees that consumers are paying. What is clear, however, is that these fees represent a sizable share of the revenue from consumer checking accounts—as noted, 61% for the study banks and a likely even higher percentage for community banks.

For similar reasons, there is some uncertainty as to the trends with respect to this source of income. Public reports show that from 1984 through 2012, aggregate deposit service charges reported by banks and thrifts insured by the FDIC grew from \$6.6 billion to \$34.2 billion.<sup>17</sup> Bank and thrift service charges on deposit accounts declined since peaking at over \$42 billion in 2008; however, despite this drop-off, charges still grew at an average annual rate of 6.1% (3.1% inflation-adjusted) over the 28 years available in the FDIC’s Quarterly Banking Profile (see Figure 2 below). Credit union fee income, meanwhile, experienced no similar recent decline and grew by over 15% from 2007 to 2012.<sup>18</sup>

**FIGURE 2:** SERVICE CHARGES ON DEPOSIT ACCOUNTS FOR FDIC-INSURED INSTITUTIONS, 1984-2012



Source: FDIC Quarterly Banking Profile Q4 2012

The growth in overall deposit service charges occurred at a time when banks were generally migrating away from charging monthly fees on checking accounts but parallels the increased use of automated overdraft programs by financial institutions (as described above) and increases in the number of transactions—particularly debit card and ATM transactions—covered by automated overdraft programs. The FDIC found in its study of bank overdraft programs that 41% of all NSF and overdraft transactions occurring in 2006 at banks with automated overdraft programs were related to use of debit cards at the point of sale.<sup>19</sup>

The growth in overall deposit service charges likewise has paralleled an increase in per-transaction fees and implementation of extended or sustained overdraft fees. An aggregator of financial services pricing information that conducts an annual survey of checking account fees determined that the average overdraft fee increased from \$21.57 in 1998 to \$31.26 in 2012.<sup>20</sup>

The industry analyst who estimates 2012 overdraft revenue at \$32 billion also reports estimates that suggest increases in overdraft revenues contributed to the increases in deposit account service charges described above. Specifically, the analyst has estimated that overdraft fees grew from \$19.9 billion in 1990 to \$37.1 billion in 2009, before declining to \$31.6 billion in 2011, then rising slightly to \$32.0 billion in 2012.<sup>21</sup> This generally parallels the overall trend with respect to deposit service charges.

In summary, evidence from multiple sources suggests that a substantial portion of the observed growth in deposit account service charges stems from growth in consumer checking account NSF and overdraft revenues.

**Costs to Institutions from Overdraft Programs:** The costs institutions bear to provide overdraft programs can be difficult to separate from operational costs related to providing consumer checking accounts, in general. The CFPB's study banks and several financial institutions that responded to the CFPB's RFI, however, identified charged off account balances as the single largest cost associated with overdraft programs.

Most charge-offs occur when consumers are unable or perhaps unwilling to repay negative account balances that result from institutions covering overdraft transactions and imposing fees. Charge-off losses generally amount to a fraction of total institutional operational costs. At the study banks, charge-off totals are also small relative to the fee revenue these banks earned through their overdraft programs. Charged-off account principal balances, which are generally primarily due to overdraft programs, represented 14.4% of the net overdraft fees (not including NSF fees) charged at study banks in 2011.

**Risks to Consumers:** Consumer advocates, among others, have raised concerns about the transparency of overdraft program disclosures, rising costs, and the degree to which financial

institution practices influence overdraft fee incidence.<sup>k</sup> In addition, multiple class action lawsuits have challenged industry practices with respect to transaction ordering and other policies that have allegedly increased the incidence of overdrafts and fees.<sup>l</sup> Financial institutions generally assert that consumers derive value from these practices. Some cases have settled, while others are ongoing.

As part of the FDIC's study of bank overdraft programs published in 2008, it obtained account-level data from a non-random sample of 39 banks that collectively held \$332 billion in assets. Among the banks studied, 26% of consumer accounts had overdraft or NSF transactions in the year for which data were collected. Close to 12% of consumers had one to four overdraft or NSF transactions in a year, and 5% had five to nine transactions. Although heavy users made up a small percentage of account holders, they paid the vast majority of overdraft fees. Nine percent of accountholders incurred 10 or more overdraft or NSF transactions and accounted for 84% of all overdraft and NSF fees charged.<sup>22</sup>

The FDIC's study found that accountholders in low-income areas were somewhat more likely than other account holders in the sample to incur overdrafts or NSFs; they were also more likely to be among the accountholders that incurred high numbers of overdrafts or NSFs. Young adults were also more likely to experience overdrafts or NSFs than accountholders in other age groups.<sup>23</sup> Thus, the study raised concerns that consumers from potentially vulnerable groups may shoulder a disproportionate share of NSF and overdraft fees and checking account costs.<sup>m</sup>

In a more recent FDIC study of unbanked and underbanked households, the FDIC found that unbanked households who chose not to have an account cited unexpected fees such as overdraft charges as one of the reasons for remaining unbanked.<sup>24</sup>

---

<sup>k</sup> See, e.g., Pew Charitable Trusts, *Still Risky: An Update on the Safety and Transparency of Checking Accounts* (2012); National Consumer Law Center, *Restoring the Wisdom of the Common Law: Applying the Historical Rule Against Contractual Penalty Damages to Bank Overdraft Fees* (2013); Leslie Parrish, Center for Responsible Lending, *Overdraft Explosion: Bank fees for overdrafts increase 35% in two years* 5 (Oct. 6, 2009).

<sup>l</sup> See, e.g., *Gutierrez v. Wells Fargo Bank*, 704 F.3d 712 (9th Cir. 2012), *on remand* 2013 U.S. Dist. LEXIS 69287 (N.D. Cal. May 14, 2013). Several other banks have settled lawsuits and several others are still pending, most notably in multi-district litigation in Florida. See *In re: Checking Account Overdraft Litigation*, No. 1:09-MD-02036-JLK (S.D. Fla.).

<sup>m</sup> Some industry trade associations and other respondents to the CFPB's RFI dispute this and claim there is evidence that vulnerable populations do not shoulder a disproportionate share of overdrafts and overdraft fees.

**Regulatory Interventions Relating to Overdrafts:** The overall growth in fees, and the costs they impose on a small number of heavy overdraft users noted above, contributed to increased scrutiny of overdraft programs by regulators. The FDIC, Office of Thrift Supervision (OTS), Office of the Comptroller of the Currency (OCC), Board of Governors of the Federal Reserve (the Board), and NCUA recommended changes to institutions' overdraft practices through supervisory guidance, including joint and agency-specific guidance issued in 2005.<sup>25</sup>

To further address concerns about heavy overdraft use by consumers, and with the anticipation that “improvements in the disclosures provided to consumers could aid them in understanding the costs associated with overdrawing their accounts and promote better account management,”<sup>26</sup> the Board amended Regulation DD (which implements the Truth in Savings Act) in 2005 to address certain overdraft disclosures for “promoted overdraft programs” (effective July 2006.) Then again in 2009, the Board amended Regulation DD to require new disclosures about overdraft fees and account balances (effective January 2010).<sup>27</sup> Nearly concurrently with the latter amendment, the Board amended Regulation E (which implements the Electronic Fund Transfer Act) to require that consumers provide affirmative consent for overdraft coverage of ATM withdrawals and non-recurring debit card transactions (generally at the point of sale or POS) before institutions can charge overdraft fees on such transactions. This amendment was effective as of January 2010, with a mandatory compliance date of July 1, 2010 for new customers and August 15, 2010 for existing customers.<sup>28</sup>

Continuing concerns about consumer protection and institutional safety and soundness stemming from overdraft programs were reflected in final guidance issued by the FDIC in 2010, proposed guidance from the OTS in 2010, and proposed guidance from the OCC in 2011 (which the OCC recently withdrew).<sup>29</sup> The only extant supervisory guidance is that issued by the FDIC which applies only to institutions supervised by the FDIC.

Overdraft programs have undergone significant change since the FDIC study discussed above, for various reasons including, in some instances, in response to regulatory efforts and litigation. The remainder of this paper reports initial findings and observations from the CFPB's study to understand the current features of overdraft programs and related policies, their impacts on consumers, and the further impacts of recent regulatory guidance and rulemaking.

### 3. Consumer Overdraft Incidence, Fees, and Related Account Closure

This section presents institution-level data on several consumer outcomes related to overdraft activity at the study banks. While differences in account or consumer characteristics across banks<sup>n</sup> may contribute to some differences observed in the outcomes described here, differences in each bank’s overdraft programs and policies likely are also responsible for some of the variances in consumer outcomes.

Although we cannot determine the degree to which the study banks’ policies and types of customers are similar to or different from those of other institutions, these banks hold a significant share of domestic checking deposits and thus affect meaningful numbers of consumers nationally. In this section we examine the incidence of overdraft activity and related fees for consumer checking accounts<sup>o</sup> at the study banks, and highlight the differences in these outcomes for consumers across study banks. We also summarize involuntary account closures, which can be a negative outcome associated with overdrafting. Generally, analyses in this section reflect the aggregation of or comparison across all study banks. However, some noted

---

<sup>n</sup> For example, the analyses presented here reflect the entire portfolio of consumer checking accounts at the study banks, which include different proportions of accounts that are inactive (*i.e.*, that consumers do not use for their transactional needs). Inactive accounts do not generate overdrafts because there are no transactions on the account. Other differences such as consumers’ account balances or volumes of deposits and payment transactions will likely influence their overdraft-related outcomes as well.

<sup>o</sup> Our study is limited to consumer checking accounts. It is possible that a consumer account could be used for a business purpose (for example, some small business owners may use their personal accounts for their business needs as well); however, these users likely constitute a negligible portion of all consumer accounts. Some institutions, including study banks, may enable overdrafts on other types of deposit accounts such as savings accounts. The CFPB’s analyses do not include NSF and overdraft transactions on these types of accounts.

analyses here and elsewhere in the paper draw from different subsets of study banks due to inconsistencies in bank measurement and reporting. Later sections of this paper describe how certain regulatory changes, institution policies, and overdraft program pricing and features may have influenced these consumer outcomes.

The CFPB plans analysis of de-identified account-level data obtained from random samples of each bank's customers. The samples comprise approximately 1.5 million accounts and one billion transactions and will enable us to apply a consistent methodology in measuring overdraft incidence, overdraft costs, and other metrics reported here and that are based on the computations supplied by the study banks. Analyses of that account-level data thus may result in adjustments to some of the findings derived from the aggregate-level data set forth in this report.

## 3.1 Overdraft and NSF Incidence

In 2011, 27.7% of consumer accounts experienced NSF or overdraft activity across several study banks that measured NSF/OD incidence for accounts open at any point during the year.<sup>p</sup> These were accounts that had items paid, resulting in a negative account balance, or returned due to insufficient funds (overdraft or NSF, respectively, collectively referred to as “NSF/OD items” in this paper).<sup>q</sup> The study banks included in this analysis reported the total number of NSF/OD items incurred by accounts that were open at any point in 2011, including those items for which a fee was not charged.<sup>r</sup> One in five consumer accounts (20.1%) at these banks incurred between one and 10 NSF/OD items in 2011, and 7.7% of accounts (i.e., 27.8% of the accounts with at least

---

<sup>p</sup> The FDIC's 2008 study of bank overdraft programs found that 26% of accounts at the banks in the sample experienced one or more overdraft items. These findings are not comparable because each study drew from different samples of institutions, which likely differ in institutions' overdraft programs or customer bases. In addition, the FDIC's analysis examined accounts that were opened before the year of analysis, whereas the information reported to the CFPB by the study banks includes accounts that opened and/or closed in the course of a year. *See* FDIC Study of Bank Overdraft Programs (Nov. 2008), available at [http://www.fdic.gov/bank/analytical/overdraft/FDIC138\\_Report\\_Final\\_v508.pdf](http://www.fdic.gov/bank/analytical/overdraft/FDIC138_Report_Final_v508.pdf).

<sup>q</sup> The aggregated information presented here includes data collected using different measurement methodologies. While we have accounted for these differences, further analysis with the account-level data will enable us to refine these figures.

<sup>r</sup> Fees may be waived due to a variety of policies including daily fee caps, *de minimis* thresholds, or others. *See* Section 5 for an enumeration of these policies.

one overdraft or NSF incident) were heavy users of overdraft, incurring more than 10 NSF/OD items.<sup>s</sup> The distribution of NSF/OD items varied across the study banks included in this analysis, with the share of accounts with one or more NSF/OD items varying by close to 7 percentage points. The share of accounts that heavily used overdraft varied by 3.4 percentage points across different banks.

At other study banks, where NSF and overdraft incidence was measured differently, 21.5% of consumer accounts experienced NSF or overdraft items in 2011.<sup>t</sup> Just under one in five (18.6%) accounts incurred between one and 10 NSF/OD items at these study banks in 2011. While 2.9% of accounts (or 13.5% of the accounts with at least one overdraft or NSF incident) at these banks had more than 10 NSF/OD items in 2011, the share of these accounts varied by 4.4 percentage points across different banks. Accounts incurring more than 10 NSF/OD items were more than four times as common at the bank in this analysis with the highest share of such accounts as at the bank with the lowest share of such accounts.<sup>u</sup>

## 3.2 Overdraft and NSF Fees

Accountholders that incurred one or more NSF or overdraft fees paid an average of \$225 in such fees in 2011 at the study banks that measured fees across all accounts incurring NSF/OD items in 2011.<sup>v</sup> The NSF/OD fees paid by accountholders that incurred one or more NSF/OD fees during 2011 varied widely by bank. At the two study banks with the lowest average NSF/OD fees per account, accounts with at least one NSF/OD item paid on average \$147 in NSF/OD fees in 2011. In contrast, such accounts at the two banks with the highest averages paid an average of

---

<sup>s</sup> This may understate the prevalence of overdraft experiences among consumers because the calculations were made by the banks based upon all accounts that were open at any time during 2011, including accounts that were open for only part of the year and accounts that were inactive for part or all of the year. Further analysis with the study's account-level data will examine the distribution of overdraft items among different segments of accounts, such as accounts that were active for the full year.

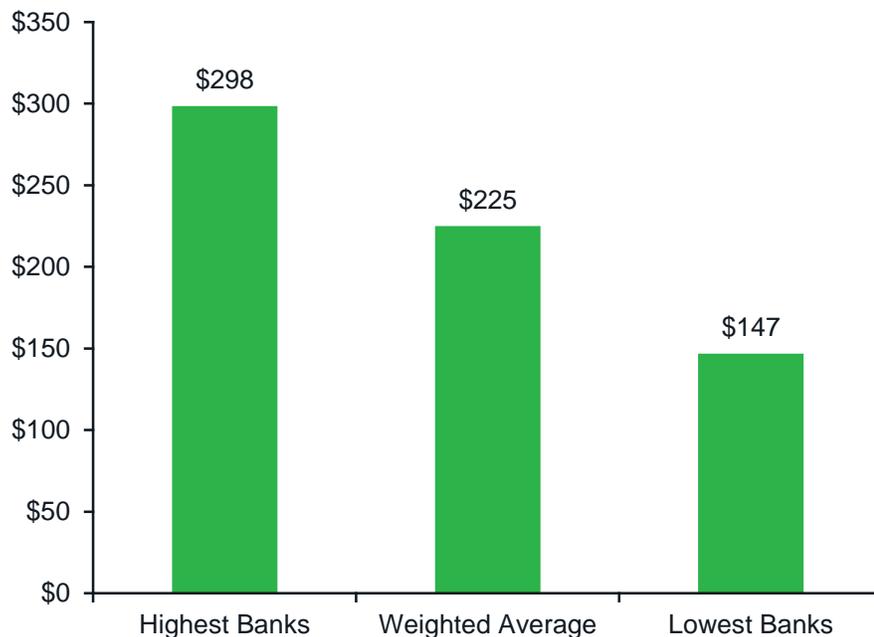
<sup>t</sup> Several of these banks measure incidence in 2011 for accounts open at the end of 2011 only, and several also include only items for which a fee was charged.

<sup>u</sup> Again, the aggregated information presented here includes data collected using different measurement methodologies. While we have accounted for these differences, further analysis with the account-level data will enable us to refine these figures.

<sup>v</sup> These fees include fees on overdraft items and NSF items at each bank. Extended overdraft fees are also included for those banks that charge such fees.

\$298. The difference in NSF/OD fees paid per account between the bank with the highest fees per account and the bank with the lowest fees per account was \$201. The chart below displays the range of average NSF/OD fees charged to accounts with at least one NSF/OD transaction that were open at any point in 2011 at the study banks.

**FIGURE 3:** AVERAGE NSF/OD FEES PER ACCOUNT INCURRING FEES AT SELECT STUDY BANKS IN 2011<sup>w</sup>



In addition, several study banks measured NSF and overdraft fees incurred throughout 2011 for accounts that were open as of the end of the year (in contrast to fees incurred by accounts open at any point during the year shown above). Average NSF/OD fees for accounts that measured costs in this way were \$301 at these banks and ranged by more than \$120, from under \$250 to over \$350.

<sup>w</sup> Figure 3 displays an unweighted average of the two study banks with the highest fees per account (“Highest Banks”) and of the two study banks with the lowest fees per account (“Lowest Banks”). The “Weighted Average” bar displays the average across all study banks included in the analysis, weighted by each bank’s number of accounts at the end of 2011.

### 3.3 Account Closure

The negative balances caused by using overdraft programs can lead to a financial institution closing a consumer's account.<sup>x</sup> Institutions vary in their policies for involuntary account closure but will close an account after a period of time has elapsed with an account's balance remaining negative and the institution has taken a charge off in the amount of the uncollected balance. Involuntary account closure is a serious outcome for consumers because it may prevent them from being able to open checking accounts at other institutions.<sup>y</sup> In 2011, 6.0% of accounts that were open at the beginning of 2011 or were opened during the year at the study banks resulted in involuntary closures.<sup>z</sup> Most study banks reported that charge offs due negative account balances represent the majority of involuntary account closures.

Involuntary account closure is much more common at some banks than others. The highest involuntary account closure rate observed in the study was 14 times the involuntary closure rate at the bank with the lowest rate.

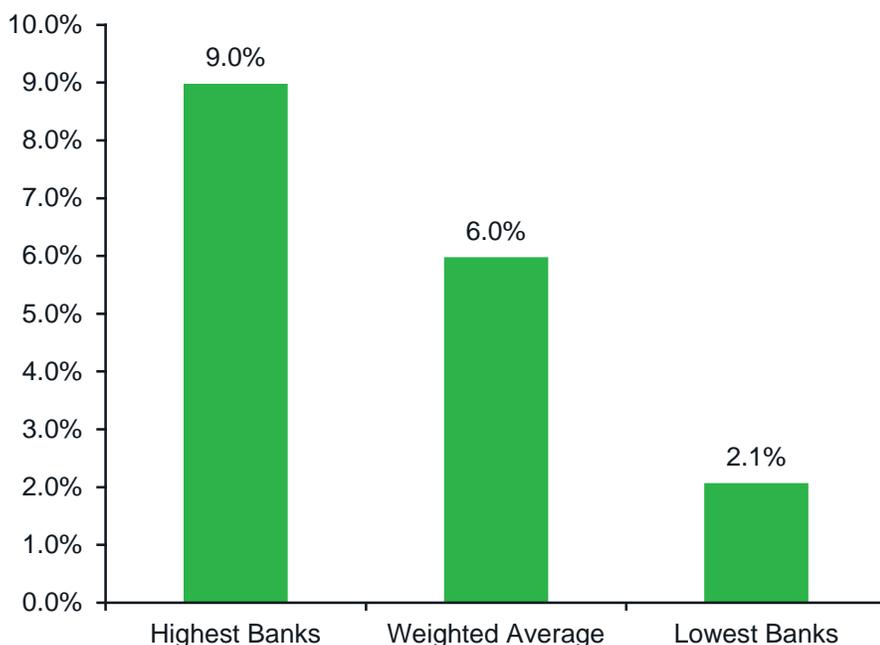
---

<sup>x</sup> Involuntary closures also can occur due to fraudulent use of an account or account takeover, due to a consumer's inability or unwillingness to repay negative balances caused by other fees charged by the bank or by returned deposited items (against which the institution has permitted payments or withdrawals), or for other reasons. Similarly, accounts can be involuntarily closed when other credit accounts held by the depositor at the institution are past due and (where permitted) the institution exercises right of offset to collect against the outstanding credit balance.

<sup>y</sup> Many financial institutions report to consumer reporting agencies when they close a checking account involuntarily due to negative balance or fraud. Institutions use the reports generated by the consumer reporting agencies to screen applicants for checking accounts and may decide to deny an application based on a recent history of involuntary account closure appearing on such a report.

<sup>z</sup> Study banks may differ in their policies for designating accounts as involuntarily closed. This figure refers to accounts that were closed involuntarily by the banks and does not include accounts that were closed at the request of consumers.

**FIGURE 4:** INVOLUNTARY ACCOUNT CLOSURE RATES IN 2011 AT STUDY BANKS<sup>aa</sup>



The great majority of involuntary account closures at the study banks are due to negative balances that accountholders are unable or perhaps unwilling to repay, and many of these closures are associated with the use of overdraft (although other unpaid fees or returned deposits may also contribute to some negative balances). Bank policies or other factors that affect the incidence of overdrafts may therefore influence the rate of involuntary account closure at a bank. Indeed, the study banks with a higher share of heavy users of overdraft (those who experienced more than 10 NSF/OD transactions in 2011) among its accountholders generally also had higher rates of involuntary account closure. Study banks with the highest shares of accounts that were heavy users of overdraft tended to have the highest rates of involuntary closure. Conversely, banks with the lowest shares of heavy users of overdraft tended to have the lowest rates of involuntarily closure.

<sup>aa</sup> Figure 4 displays an unweighted average of the two study banks with the highest involuntary closure rate (“Highest Banks”) and of the two study banks with the lowest involuntary closure rate (“Lowest Banks”). The “Weighted Average” bar displays the average across all study banks included in the analysis, weighted by each bank’s number of accounts at the end of 2011.

However, consumers who heavily use overdraft programs may not be the same consumers whose accounts are involuntarily closed. Heavy users of overdraft programs may frequently incur NSF/OD items but quickly bring their account balances positive, which would prevent involuntary closure. In contrast, a single overdraft item may cause an institution to close the account if a consumer does not pay the overdraft item and fee after an extended period of time. Future analyses using account-level data will examine the overdraft behavior of consumers whose accounts are charged off to understand the relationship between use of overdraft programs and account closure.

### 3.4 Paid vs. Returned Overdraft Items

An important consumer outcome of any overdraft program is the percentage of negative transactions that are paid (*i.e.*, result in overdrafts) or returned unpaid (*i.e.*, were NSFs).<sup>bb</sup> Paying overdraft transactions may confer some benefit (in exchange for the associated fees and other costs) to consumers by helping them make timely payments and avoid late penalty fees and/or interest charges from a merchant or biller. In contrast, returning an item generally confers little benefit to the consumer (other than perhaps deterring future overdrafting and any subsequent consequences) and can result in an NSF fee as well as additional related fees, such as a returned check fee charged by the institution to whom the check was presented or a late fee charged by the entity to whom payment was due. At the median, study banks paid into overdraft 83% of transactions that exceeded the available balance in 2011 and returned 17%.

---

<sup>bb</sup> Declined ATM and POS transactions are generally not considered returned items.

## 4. Overdraft Use Following the 2010 Opt-In Requirement Under Regulation E

In 2009, the Board amended Regulation E to require institutions to obtain the affirmative consent of consumers before charging overdraft fees on ATM and non-recurring point of sale (“POS”) debit card transactions.<sup>30</sup> This section explores opt-in rates<sup>cc</sup> among different consumers (including heavy users of overdraft) and across banks. It then compares outcomes for consumers who did and did not opt in to ATM/POS debit card coverage and examines the change in overdraft items and fees experienced by consumers who did and did not opt in to attempt to understand how overdraft use changed after the implementation of changes to Regulation E.

---

<sup>cc</sup> Throughout this paper, our discussion of opt-in rates and overdraft programs is limited to checking accounts only, although related regulations (Regulation E and Regulation DD) apply to other types of accounts as well. Regulations E and DD have been recodified by the CFPB.

Some institutions enable consumers to affirmatively opt out of all fee-based overdraft coverage—that is, on any type of transaction, including checks and ACH. This option is not frequently advertised, however, and many institutions that offer this option will charge an NSF fee on check and ACH transactions that are returned due to insufficient funds. In addition, among those institutions that offer checking products without an opt-in option for ATM and POS overdraft coverage, some institutions also will not pay check or ACH transactions in the absence of sufficient available funds. Again, such institutions may charge an NSF fee on check and ACH transactions when such items are rejected. Some of these accounts are “second chance” products for consumers with prior histories of account charge offs, designed to limit credit risk posed by these accountholders to the institutions. These products are also intended to prevent consumers from incurring NSF fees as well as overdraft charges by restricting check writing. A 2011 survey of institutions supervised by the FDIC found that 44% of institutions with assets of \$38 billion or more offered second chance products, while 32% of mid-sized institutions and 20% of community banks did so. 2011 FDIC Survey of Banks’ Efforts to Serve the Unbanked and Underbanked, p.16 (Dec. 2011).

## 4.1 Overview of Regulatory Changes

As previously noted, when a consumer accesses his or her account through an ATM or debit card, the institution must determine whether to authorize the transaction in real time. With the advent of automated overdraft systems and pre-set overdraft coverage limits, many institutions elected to authorize these transactions although the consumer did not have sufficient available funds. These authorizations typically resulted in overdraft charges.

In 2009, the Board amended Regulation E to regulate this practice.<sup>31</sup> Beginning on July 1, 2010 (August 15, 2010 for existing accountholders), institutions wishing to offer and charge for overdraft coverage on ATM or POS debit card transactions have been required to obtain affirmative consent from consumers to receive fee-based overdraft coverage for these transactions; the amendment treats no coverage as the default so that a consumer who did not provide affirmative consent is deemed to have not opted in.

While an institution may authorize ATM and POS transactions that result in a negative balance on accounts that have not opted in at its discretion, the institution may not assess overdraft fees for paying these transactions. Consequently, institutions typically decline ATM and debit card transactions on accounts not opted in that would otherwise result in an overdraft or increase the outstanding negative balance of an account.<sup>dd</sup> The study banks all reported that they do not assess NSF fees for declining these transactions.

## 4.2 Variations in Implementation Approaches

In the wake of the amendments to Regulation E, institutions that were charging their customers for ATM and POS debit overdrafts and that desired to continue to do so were required to invite their customers to opt in. Many institutions did just that. However, other institutions chose other paths.

---

<sup>dd</sup> In the preamble to the Regulation E amendment, the Board raised concerns under the FTC Act in the event that a financial institution charged an NSF fee for declining these attempted transactions. Electronic Fund Transfers, Regulation E (Final rule), 74 Fed. Reg. 59033, 59041 (Nov. 17, 2009).

For example, 41% of community banks surveyed by a community bank trade association report that they will not authorize ATM/POS debit card transactions unless there are sufficient available funds in the consumer's account to cover the transaction.<sup>32</sup> Other institutions enable consumers to opt in solely for POS debit card transactions, while a third category of institutions permits customers to opt in only for ATM transactions. In addition, some institutions allow their customers to opt in to overdraft coverage on ATM withdrawals on a per-transaction basis, but only at the bank's own ATMs. At these institutions, when an ATM withdrawal will overdraw an account, the consumer receives one or more on-screen warnings that he or she may be charged a fee if he or she proceeds with the transaction.

## 4.3 Opt-In Rates

How the opt-in requirement under Regulation E affected the total overdraft and NSF fees charged to consumers is related to whether consumers chose to opt in. Opt-in rates reported publicly by industry trade associations have varied considerably. For example, one bank trade association reported an aggregate Regulation E opt-in rate of 16% across 18 member institutions that offer ATM or POS overdraft coverage.<sup>33</sup> In contrast, a community bank association's survey found an average opt-in rate of approximately 60% among its members<sup>cc</sup> that allowed customers to opt in.<sup>34</sup> The CFPB's study provides an opportunity to observe opt-in rates for accounts comprising a large (though not necessarily representative) share of the U.S. banking population.<sup>ff</sup>

**Opt-In Rates Across All Accounts:** The weighted average portfolio opt-in rate — *i.e.*, the percentage of all consumer checking accounts affirmatively opted in for fee-based ATM/POS debit card overdraft coverage— among the study banks at the end of 2011 was 16.1%. If a bank did not offer opt-in, their accounts were excluded from this calculation.<sup>gg</sup>

---

<sup>cc</sup> Fifty-nine percent of the institutions participating in the community bank association's survey offer coverage for ATM and POS debit card transactions.

<sup>ff</sup> The CFPB's study observed opt-in rates at the end of 2010 and the end of 2011. The opt-in rates reported here reflect this time period and may have changed since the study data were collected.

<sup>gg</sup> However, several study banks that do allow opt-in preclude certain accountholders, usually by product, from opting in. These consumer accounts are included in the opt-in rate measurements, which thus may be understated.

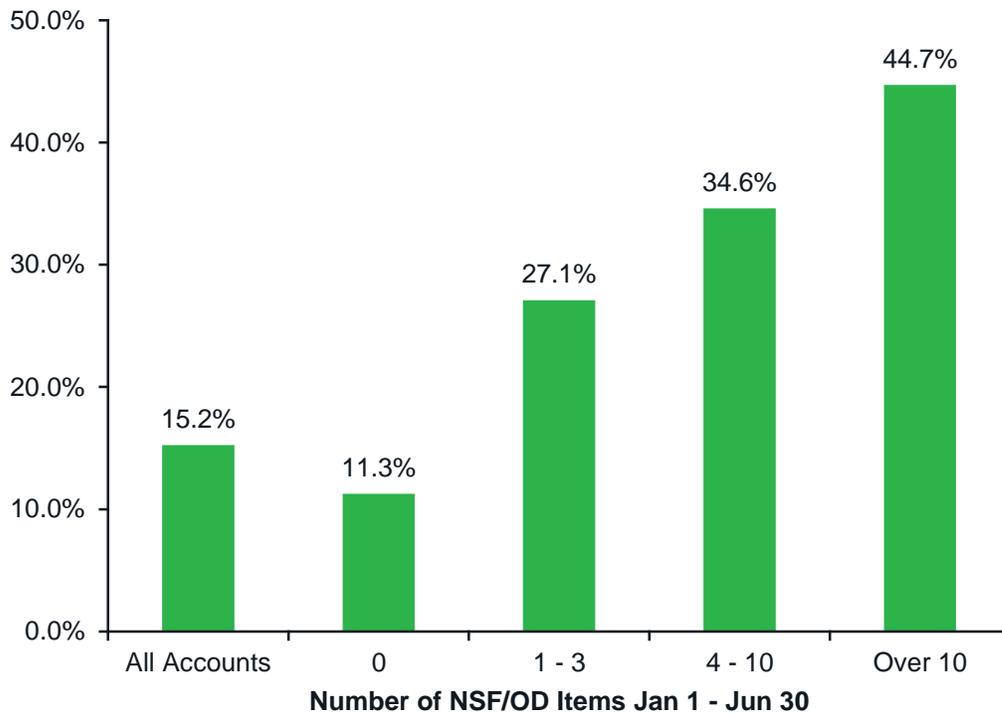
**Opt-In Rates for New Accounts:** As of the end of 2011, the weighted average opt-in rate among study banks offering the option to opt in was 22.3% for accounts that were opened during 2011. At most banks in the study, opt-in rates for accounts opened after the effective date of the Regulation E amendment tended to be higher than opt-in rates for accounts that had been opened previously. This is likely because bank personnel are able to secure an election from the customer as part of the account opening process, usually in-person at a branch. In contrast, existing customers had to be solicited to opt in through statements and various marketing channels and would be considered not opted in by default if they did not respond.

**Highest Opt-In Rates for Accounts with Prior Heavy Overdraft History:** Data collected by the CFPB from study banks indicates that consumers' likelihood of opting in when the opt-in requirement took effect appears related to their prior usage of overdraft programs. Figure 5 below shows that 44.7% of accounts that had more than 10 NSF/OD items during the first six months of 2010 elected to opt in by the end of 2010.<sup>hh</sup> In contrast, only 11% of accounts with no NSF or overdraft transactions from January through June of 2010 chose to opt in when given the opportunity to do so. The consumer's decision to opt in could be influenced by a bank's approach to marketing ATM and POS debit card overdraft coverage, a consumer's preferences to have these types of transactions authorized, or the interaction of these or other factors.

---

<sup>hh</sup> To measure the opt-in rate of accounts by their overdraft use, we used data from a different time period than for the opt-in rates described for recently opened and portfolio accounts. Therefore, the overall opt-in rate of 15.2% at the end of 2010 displayed here differs from the overall opt-in rate of 21.4% that we observed at the end of 2011.

**FIGURE 5:** PERCENTAGE OF ACCOUNTS THAT HAD OPTED IN TO ATM/POS DEBIT CARD OVERDRAFT COVERAGE AS OF DECEMBER 2010 BY NUMBER OF NSF/OD ITEMS IN FIRST HALF OF 2010 AT SELECT STUDY BANKS<sup>ii</sup>



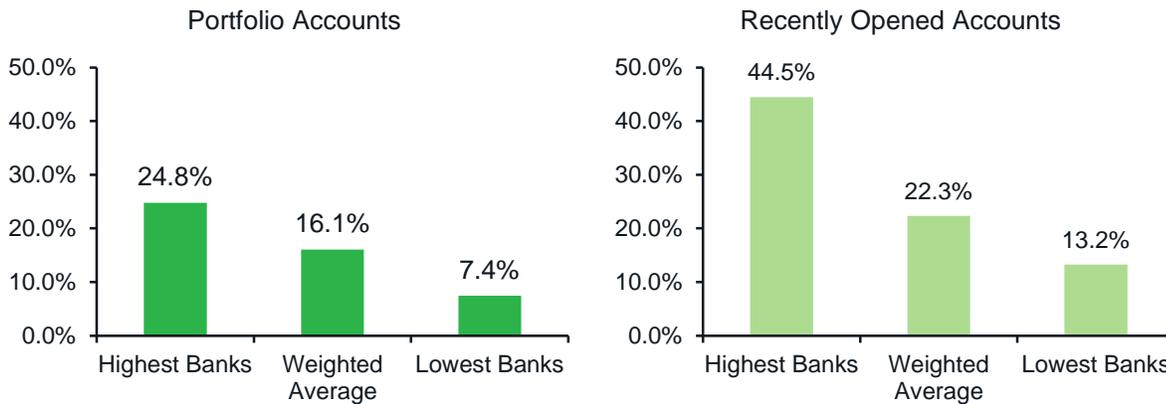
## 4.4 Variations in Opt-In Rates by Bank

**Portfolio and New Account Opt-In Rates:** Opt-in rates ranged by nearly 20 percentage points among the study banks’ portfolios of accounts as of the end of 2011. Figure 6 displays the range of opt-in rates for new accounts and for all accounts at banks in the CFPB’s study. The opt-in rate for accounts opened during 2011 ranged from single-digit percentages to over 40% across the study banks. The opt-in rate for new accounts at the bank with the highest opt-in rate for these accounts was nearly 8 times the opt-in rate at the bank with the lowest rate. Opt-in

<sup>ii</sup> Over four-fifths—*i.e.*, 81.0%—of accounts in this analysis had 0 NSF/OD items between January 1 and June 30, 2010; 10.3% of accounts had 1 to 3 NSF/OD items during this time period, and 5.6% and 3.1% had 4 to 10 and over 10 NSF/OD items, respectively.

rates for new accounts have increased since the end of 2011 and, for some study banks, surpassed 50% in 2012.

**FIGURE 6:** PERCENTAGE OF ACCOUNTS THAT HAD OPTED IN TO ATM/POS DEBIT CARD OVERDRAFT COVERAGE AS OF DECEMBER 2011 AT SELECT STUDY BANKS<sup>jj</sup>

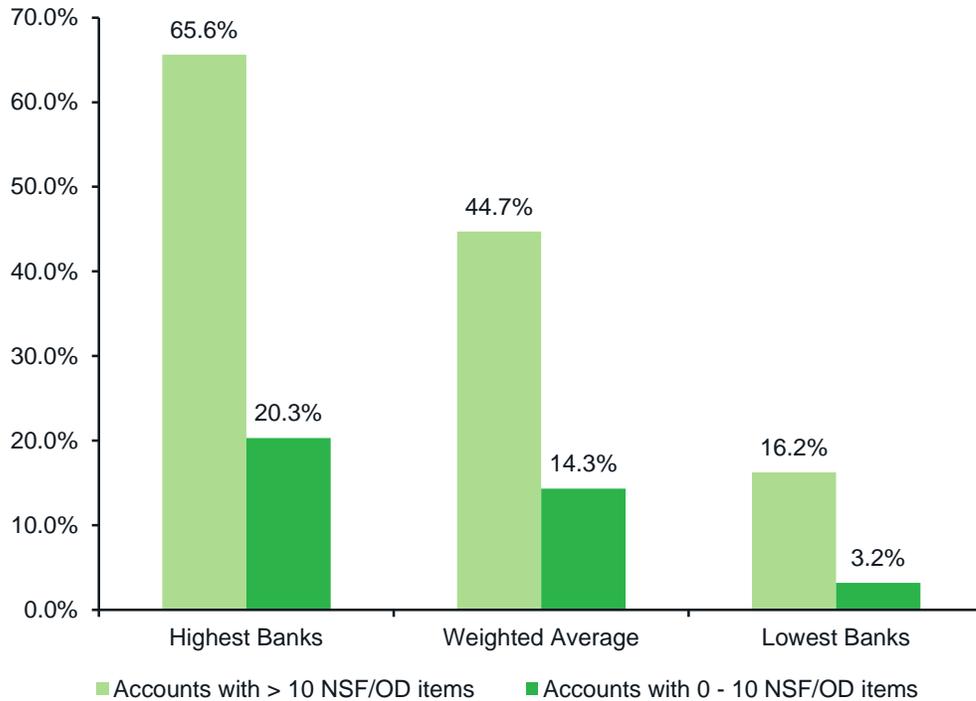


**Heavy Overdrafter Opt-In Rates:** Opt-in rates at the end of 2010 at banks in the CFPB’s study were highest among accountholders that incurred more than 10 NSF/OD items in the first half of 2010<sup>kk</sup>; however, opt-in rates for heavy overdrafters varied considerably across study banks (see Figure 7 below). The bank with the highest opt-in rate among heavy overdrafters had an opt-in rate 55 percentage points higher than the bank with the lowest opt-in rate among heavy overdrafters, and its opt-in rate for these accounts was more than 4 times its opt-in rate for accounts that had 10 or fewer NSF/OD items in the first half of 2010.

<sup>jj</sup> Figure 6 displays unweighted averages of the two study banks with the highest opt-in rate (“Highest Banks”) and of the two study banks with the lowest opt-in rate (“Lowest Banks”) for both recently opened and portfolio accounts. The “Weighted Average” bars display the average across all study banks included in the analysis, weighted by each bank’s number of accounts at the end of 2011.

<sup>kk</sup> Consumers that incur fewer than 10 NSF/OD items may still incur substantial fees and thus may be considered by some to be heavy overdrafters. For purposes of the discussions in this paper we have set 10 items as the threshold constituting heavy overdraft incidence.

**FIGURE 7:** PERCENTAGE OF ACCOUNTS THAT HAD OPTED IN TO ATM/POS DEBIT CARD OVERDRAFT COVERAGE AS OF THE END OF 2010, BY NSF/OD ITEMS IN THE FIRST HALF OF 2010 AT SELECT STUDY BANKS<sup>II</sup>



## 4.5 The Impacts of Opting In and Not Opting In

**Variation in Consumer Outcomes by Opt-In Status:** The following section describes the effect of opting in to ATM/POS debit card overdraft coverage on some of the consumer outcomes described in Section 3. In particular, this paper compares fees paid per account and involuntary account closure rates for accounts that do and do not opt in. Future analysis of

<sup>II</sup> Figure 7 displays unweighted averages of the two study banks with the highest heavy overdrafter opt-in rate (“Highest Banks”) and of the two study banks with the lowest heavy overdrafter opt-in rate (“Lowest Banks”). The “Weighted Average” displays averages across all study banks included in the analysis, weighted by each bank’s number of accounts at the end of 2010.

transaction-level data will enable comparisons between those who did and did not opt in for other outcomes, including overdraft incidence, concentration of frequent overdrafters, and the ratio of paid and returned items.<sup>mmm</sup>

Total overdraft and NSF fees assessed on all accounts open during 2011—including those with and without overdraft or NSF items in 2011—across the study banks in this analysis averaged \$70 per account in 2011.<sup>nnn</sup> Average fees diverge widely by opt-in status, in part because opting in means that more of a consumer's transactions have the possibility of incurring overdraft fees (whereas study banks do not assess overdraft or NSF fees for declined ATM and POS transactions for accounts that are not opted in), and because consumers who have more transactions against a negative account balance are also more likely to opt in, as shown above in Figure 5. Accountholders that chose to opt in to ATM/POS debit card coverage incurred \$196 in overdraft or NSF fees on average in 2011, while those who did not opt in experienced \$28 in fees on average (again, these figures include accounts that did and did not incur any overdraft or NSF fees).

Opted-in accounts had higher rates of involuntary closure than accounts that had not opted in at each of the study banks. Overall, 8.5% of opt-in accounts at the study banks were involuntarily closed in 2011, while 5.5% of accounts not opted in experienced involuntary closure. Involuntary closure rates were more than 2.5 times as high for opt-in accounts as for accounts that had not opted in at several study banks.

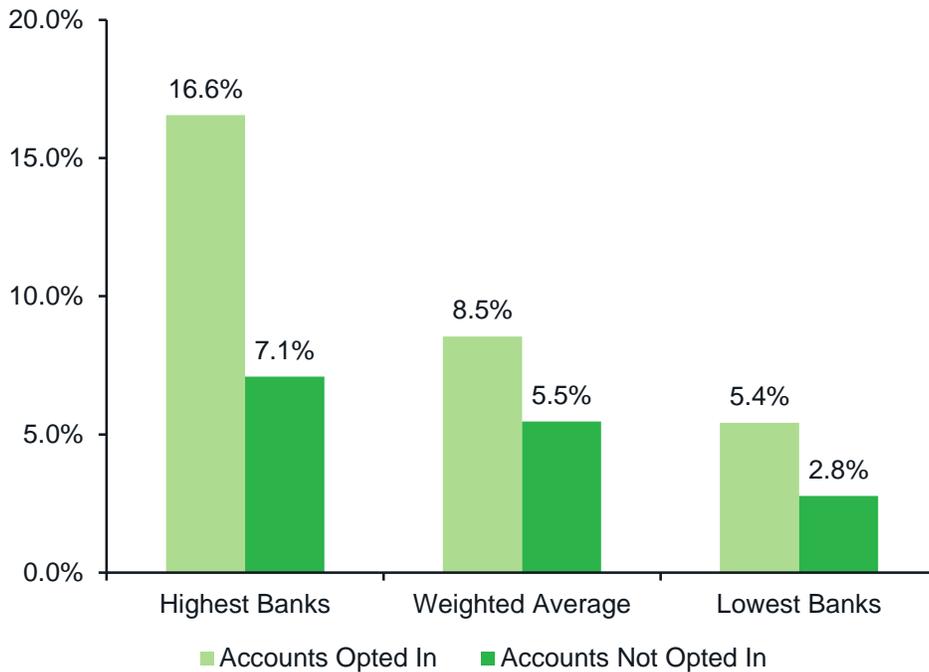
While involuntary closure rates were consistently higher for opted-in accounts than accounts not opted in across study banks, involuntary closure rates varied widely between study banks both for accounts opted in and not opted in. The bank with the highest involuntary account closure rate of opted-in accounts closed 6.6 times more such accounts than the bank with the lowest involuntary closure rate for these accounts.

---

<sup>mmm</sup> We assessed changes in overdraft frequency and fees paid for some consumers after the implementation of Regulation E to assess the impacts of opting in versus not doing so. These results are presented in this paper. The transaction-level data obtained by the CFPB from the study banks will enable similar analyses for other differences between those who did and did not opt in.

<sup>nnn</sup> In contrast, the average fees per account of \$225 discussed in Section 3.2 reflects only those accounts that had overdraft or NSF activity in 2011. Future analysis will assess similar comparisons between accounts opted in and not opted in.

**FIGURE 8:** INVOLUNTARY ACCOUNT CLOSURE RATES IN 2011 BY ATM/POS DEBIT CARD COVERAGE STATUS AT SELECT STUDY BANKS<sup>oo</sup>



**Reduction in Overdraft Items for Accounts That Did Not Opt In:** To understand how the changes to Regulation E to require opt-in may have affected consumers<sup>pp</sup> in the year of implementation, we examined overdraft usage and fees at the study banks during the first and second half of 2010, which closely approximates the periods before and after the implementation of the opt-in requirement under Regulation E.<sup>qq</sup> To measure differences between these two periods, we limit this analysis to consumer checking accounts that were open

<sup>oo</sup> Figure 8 displays unweighted averages of the two study banks with the highest involuntary closure rate among accounts opted in (“Highest Banks”) and of the two study banks with the lowest involuntary closure rate among accounts opted in (“Lowest Banks”). The “Weighted Average” bars display averages across all study banks included in the analysis, weighted by each bank’s number of accounts at the end of 2011.

<sup>pp</sup> The analyses in this section focuses on overdraft and NSF items and fees and does not incorporate any changes that may have occurred in other fees at the study banks or in consumers’ use of other financial products that offer short-term liquidity.

<sup>qq</sup> To the extent that the study banks may have complied with the Regulation E election requirements before the mandatory compliance date, or to the extent that consumers elected to opt in after the mandatory compliance date but before the end of 2010, this analysis may understate the potential reduction in fees associated with not opting in.

for the entirety of 2010.<sup>rr</sup> The findings described here therefore do not incorporate the overdraft activity of accounts that opened or closed partway through the year, including those that were closed as a result of overdraft activity.

Several changes other than the changes to Regulation E may have also influenced consumers' experiences with overdraft programs throughout 2010. These other changes may include new disclosure requirements pursuant to amendments to Regulation DD described earlier that became effective in January 2010. In addition, some institutions implemented changes to their overdraft programs in 2010 (in response to legal, consumer protection, risk management, and other concerns), such as by setting fee caps or *de minimis* negative balance or transaction amounts (below which fees are waived). Other factors that may influence overdraft usage also vary over time, such as seasonal changes in income and spending or macroeconomic changes.

The influence of regulatory changes and other external factors described above is likely different for consumers who previously overdrafted with great frequency than for consumers who overdrafted only occasionally or not at all. Consequently, we segmented accounts in this analysis by the number of NSF/OD items the accounts incurred in the first half of 2010. Within these segments of accounts, we compared outcomes between consumers who did and did not opt in to ATM/POS debit card overdraft coverage to try to home in on the effects of changes to Regulation E.

Figure 9 shows the change in the number of overdraft and NSF items from the first to the second half of 2010 for consumers whose accounts were open for the full year.<sup>ss</sup> Consumers who had experienced overdraft or NSF items in the first half of 2010 and did not opt in to debit card coverage saw significant declines in the number of overdraft items they experienced in the second half of the year. The decline in overdraft items was greatest for the heaviest overdrafters who did not opt in, defined as consumers with more than 10 NSF/OD items between January 1 and June 30, 2010. These consumers experienced an average of 21.5 overdraft items during the

---

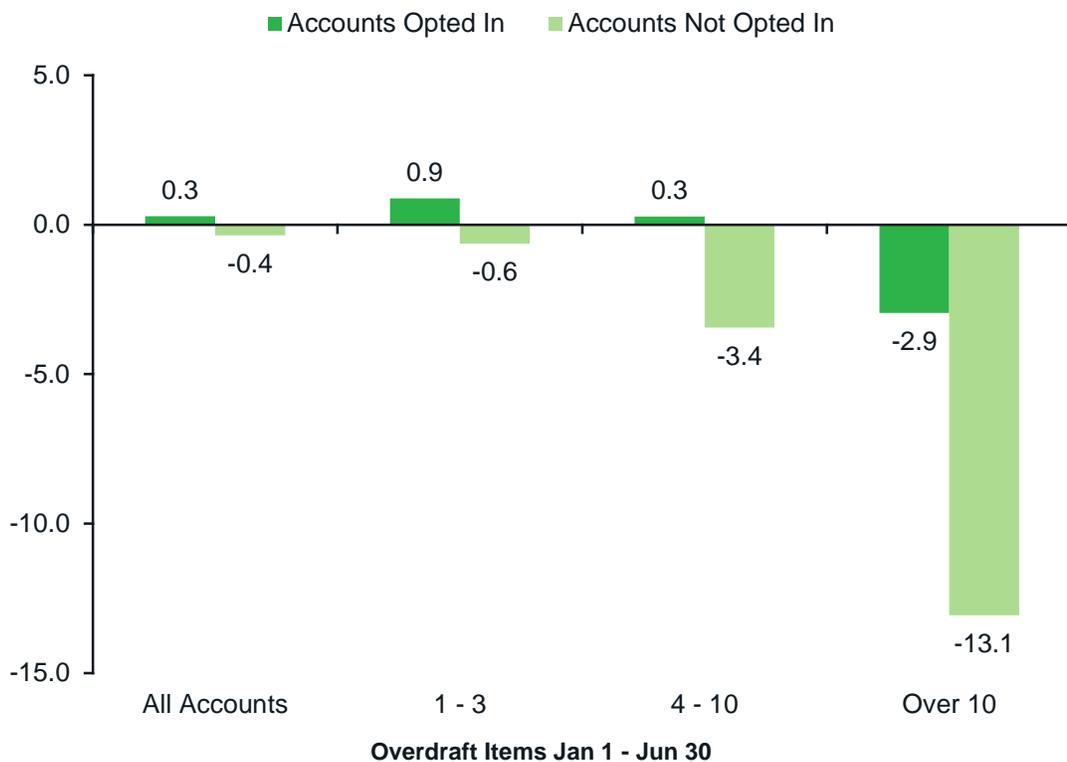
<sup>rr</sup> The analysis suggests no significant changes between the first half of the year and the second half in terms of average monthly deposits or debit card activity.

<sup>ss</sup> These figures describe average changes in overdraft items across all accounts by debit card coverage status, which includes accounts that experienced no overdraft or NSF items. See Figure 5 for opt-in rates by account segment and the percentage of accounts in each segment.

first half of 2010, and subsequently saw the number of overdraft items they experienced in the second half of the year drop by 13.1 items.

In contrast, consumers who had more than 10 NSF/OD items in the first half of the year and opted in to overdraft coverage on ATM/POS debit card transactions experienced a reduction of 2.9 NSF/OD items. Consumers with 1 to 10 NSF/OD items in the first half of 2010 who opted in experienced slightly more NSF/OD items in the second half of the year.

**FIGURE 9:** AGGREGATED CHANGE IN NUMBER OF OVERDRAFT AND NSF ITEMS PER ACCOUNT BY CONSUMERS' PRIOR OVERDRAFT INCIDENCE AT SELECT STUDY BANKS – FIRST HALF OF 2010 VS. SECOND HALF<sup>tt</sup>

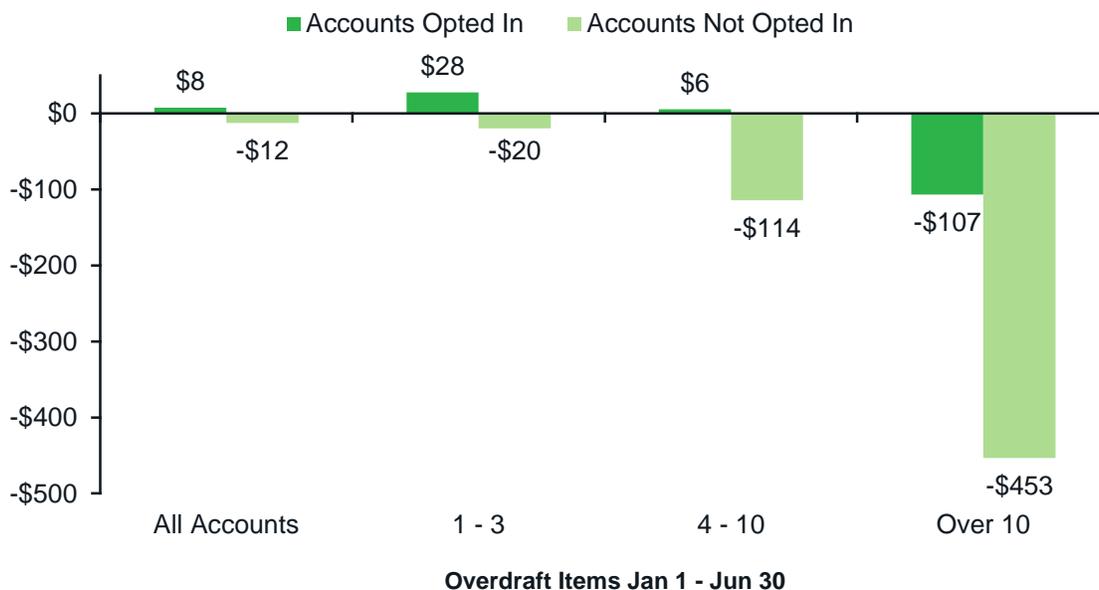


<sup>tt</sup> The aggregated information presented here includes data collected using different measurement methodologies. While we have accounted for these differences, further analysis with the account-level data will enable us to refine these figures.

**Reduction in NSF/OD Fees for Accounts That Did Not Opt In:** The reductions in overdraft and NSF items that consumers experienced after the implementation of changes to Regulation E translated into lower overdraft and NSF fees. Accounts that did not opt in experienced a 45% drop in fees in the second half of 2010, while opt-in accounts saw an 8% increase in fees.

Consumers who had heavily used overdraft programs in the first half of 2010 who did not opt in experienced the greatest reduction in overdraft and NSF fees on these same accounts. The fees on these consumers' accounts dropped by 63%, or over \$450 per account, on average, in the second half of 2010.<sup>uu</sup>

**FIGURE 10:** AGGREGATED CHANGE IN OVERDRAFT AND NSF FEES PER ACCOUNT BY CONSUMERS' PRIOR OVERDRAFT INCIDENCE – FIRST HALF OF 2010 VS. SECOND HALF<sup>vv</sup>



<sup>uu</sup> As noted earlier, the analyses in this section focuses on overdraft and NSF items and fees and does not incorporate any changes that may have occurred in other fees at the study banks or in consumers' use of other financial products that offer short-term liquidity.

<sup>vv</sup> The aggregated information presented here includes data collected using different measurement methodologies. While we have accounted for these differences, further analysis with the account-level data will enable us to refine these figures.

Some of the reduction in overdraft items and fees experienced by consumers with very high previous overdraft use may reflect “regression to the mean.” That is, some consumers may have been in the highest usage category because they had experienced an unusually high number – for them – of overdrafts in the first half of 2010. The differences in the changes in overdraft and NSF activity between accounts opted in and accounts not opted in may therefore provide a better indicator of the opt-in requirement’s effect. This difference in changes could be described as the “net reduction” in overdraft activity for these accounts.<sup>ww</sup> Table 1 below shows that the consumers with the most overdraft activity realized the highest net savings from not opting in after the opt-in requirement took effect. These consumers saved an average of \$347 or 49% in NSF/OD fees, on net, in the second half of 2010.

**TABLE 1:** CHANGE IN OVERDRAFT AND NSF FEES PER ACCOUNT IN 2010 AFTER THE IMPLEMENTATION OF CHANGES TO REGULATION E AT SELECT STUDY BANKS

Change in Overdraft and NSF Fees per Account	All Accounts*	Number of NSF/OD Items Per Account**		
		1 - 3	4 - 10	> 10
Accounts Opted In	\$8	\$28	\$6	-\$107
Accounts Not Opted In	-\$12	-\$20	-\$114	-\$453
<b>Difference (Net Reduction)</b>	<b>-\$20</b>	<b>-\$47</b>	<b>-\$120</b>	<b>-\$347</b>

\* All accounts include accounts with no NSF/OD items.

\*\* Number of NSF/OD Items per Account January 1 to June 30, 2010

## 4.6 Variation in the Changes in NSF/OD Incidence

The degree to which overdraft and NSF activity dropped after the changes to Regulation E varied across study banks. Heavy users of overdraft programs who did not opt in saw, on

<sup>ww</sup> These differences could overstate the effect of the opt-in requirement if consumers who thought they were more likely to overdraft in the future were also more likely to opt in to overdraft coverage.

average, great reductions in NSF/OD fees in the second half of 2010; however, the reduction in fees for these consumers ranged by close to twenty percentage points across different banks.

Fees dropped for heavy overdrafters that chose to opt in at each bank as well, and these consumers also experienced a range of outcomes across study banks after the implementation of changes to Regulation E. At the study banks with the greatest drop in fees for opt-in accounts, these accounts experienced a 19.5% reduction in their NSF/OD fees between the first and second half of 2010. Opt-in accounts at the study banks with the smallest drop in fees for such accounts experienced a 3.3% reduction. These different reductions in fees for heavy overdrafters who opted in may reflect differences across banks in their overdraft program configurations or other policies that influenced the incidence of overdrafts (in addition to the differences in consumers across banks and other factors discussed earlier). The following section describes these policies and their variations across banks.

## 5. Overdraft Policies and Practices across Institutions

The range of consumer outcomes across study banks discussed in Section 3 may reflect in part the different proportions of consumers at each bank that opted in to ATM/POS debit card overdraft coverage. Section 4 illustrated how the decision whether to opt in may influence consumer outcomes, including the outcomes of consumers who previously incurred overdrafts. The wide variation in opt-in rates across banks, even among heavy overdrafters who demonstrated the highest propensity to opt in, suggests a number of factors may influence opt-in rates.

Several findings in Section 4 indicate that other factors besides the differences across banks in opt-in rates also affect consumer outcomes. In particular, differences across study banks in the share of consumers who were heavy overdrafters prior to the implementation of Regulation E's opt-in requirement, and in closure rates and fee reductions for consumers with the same Regulation E election, suggest that other factors play a role in the variations in consumer outcomes across banks.

This section details processing policies, overdraft program features and pricing, and other practices that may affect the outcomes that consumers experience and that vary across banks.<sup>xx</sup> Future analyses will evaluate how these policies may contribute to the consumer outcomes outlined in Section 3.

---

<sup>xx</sup> Other policies not discussed in this section may also impact the consumer outcomes analyzed in this paper. For example, differences in charge off policies across the study banks may contribute to some of the differences in involuntary closure rates.

## 5.1 Calculating Available Funds

To determine whether a consumer's transactions cause his or her account balance to become negative, depository institutions calculate an account's available funds. Institutions' information and accounting systems use a set of rules to determine when newly deposited items are deemed to increase the available funds be available in an account and when a payment or debit transaction is deemed to reduce the available funds in the account. When a consumer makes a check deposit into his or her account, there will often be a delay before the deposited check clears and the bank receives funds from the bank on which the item is drawn. Similarly, when a consumer writes a check, uses a debit card, or authorizes an ACH payment, there can be a delay between the time the consumer initiates the payment and the time the item is settled by the institution and funds are disbursed to cover the transaction.

**Authorization, Settlement and Available Balance:** When a consumer attempts a debit card purchase or ATM withdrawal, the consumer's financial institution receives an instantaneous request to authorize the transaction.

Some authorized transactions, such as PIN-based debit card and ATM transactions, nearly always settle the same business day they are authorized. Other authorized transactions, most notably signature-based debit card transactions, may not be presented for settlement for a day or two after authorization. Many institutions, upon authorizing a transaction, will then make an entry (referred to as "memo posting") that reduces the funds deemed to be available to the consumer.<sup>yy</sup> This enables these institutions to take these transactions into consideration in determining whether to authorize subsequent electronic transactions during the course of the day. Generally, available funds are reduced by the amount of the authorized transaction. However, for certain types of transactions where the amount authorized is often different than the amount that will settle – for example, gasoline purchases – institutions may reduce the available funds by the full authorization amount (which could exceed that actual purchase amount), reduce the available funds by an amount that may be substantially less than the purchase amount (such as \$1), or elect not to make any reduction in available funds.

---

<sup>yy</sup> As discussed in further detail below, "memo posting" is used by institutions that post transactions in batch, generally in a nightly processing cycle. Some institutions post transactions in real time, in which event there is no need to memo post these items.

**Funds Availability on Deposits Policies:** Institutions are bound by the Expedited Funds Availability Act to provide at least the first \$200 of certain checks deposited in person at the start of the next business day, or on the second business day for deposits made at proprietary ATMs.<sup>35</sup> An institution can choose to “hold” any amount on certain checks exceeding \$200 (*i.e.*, a “hold” is placed on that part of the deposit) and not credit the account until the hold is released. In most cases, holds will not extend longer than five business days, but institutions generally release funds much sooner. Some of the study banks report that they make the total check amount available immediately for many deposits, while other banks reported doing so in their nightly processing of transactions on the day the deposit is made (provided that the deposit is made prior to the cutoff time for the nightly processing, which varies among banks). Regulation CC, which implements the Expedited Funds Availability Act, similarly requires that funds from ACH deposits be made available to consumers on the next business day from when they are received. Most institutions generally make ACH deposits available as they are received.<sup>zz</sup>

Institutions may make some exceptions to their general funds availability policies. Regulation CC permits institutions to place longer holds on deposits to new accounts or to accounts with repeated overdrafts, on deposits that are of large amounts, and when re-depositing checks that have been returned or that raise “reasonable cause to doubt collectability.”<sup>36</sup> These exceptions may add to the variation in funds availability between institutions and result in differences in when an account will be deemed to have insufficient funds to cover a payment.<sup>aaa</sup> To the extent institutions elect to make funds available earlier than required by law, these availability policies provide consumers with higher available balances at an earlier point in time and thus may result in more cleared items and potentially fewer overdraft or NSF charges to consumer accounts.

---

<sup>zz</sup> The FDIC’s Survey of Banks’ Efforts to Serve the Unbanked and Underbanked found that some institutions provide more generous funds availability on deposits than Regulation CC requires. For example, 29% of respondents with less than \$1 billion in assets reported that funds for a \$2,500 check deposited with a teller or via an ATM “would ordinarily be available...on the same business day” as the check was received. *See* 2011 FDIC Survey of Banks’ Efforts to Serve the Unbanked and Underbanked, p.16 (Dec. 2011).

<sup>aaa</sup> In March 2011, the Board proposed amending Regulation CC to shorten “exception” hold periods on deposited funds and make certain other changes. *See* Availability of Funds and Collection of Checks (Proposed Rule), 76 Fed. Reg. 16862 (Mar. 25, 2011). The Expedited Funds Availability Act provides that that the Board, jointly with the Director of the Bureau of Consumer Financial Protection, shall, by regulation, reduce the time periods “to as short a time as possible and equal to the period of time achievable under the improved check clearing system for a receiving depository institution to reasonably expect to learn of the nonpayment of most items for each category of checks.” *See* Expedited Funds Availability Act, 12 U.S.C. § 4002(d)(2).

## 5.2 Transaction Processing and Posting Orders

**Nightly Batch Processing:** Most financial institutions engage in a process of posting transactions (credits and debits) to the account after the close of business each day. The nightly posting process modifies an account's ledger balance by adding credits (funds made available from deposits and other positive adjustments, such as interest credits) and subtracting debits already paid out (withdrawals and wires) or considered paid out (PIN debit transactions), debits eligible to be settled (checks or ACH items presented for payment), or otherwise deemed final by the institution (other charges or negative adjustments). An account's ledger balance is the balance after each transaction has settled for the account. Most institutions only post credit and debit items on weekday nights (excluding holidays); thus, weekday nights are frequently the only times when an account's ledger balance is adjusted. Consequently, at many institutions, regardless of what account activity has occurred during a weekday or over a weekend, the account ledger balance remains unchanged from its ending position in the last weekday night's posting process until the completion of the next weekday night's posting process.<sup>bbb</sup>

**Posting Order:** The treatment of debit authorizations and funds availability policies together with an institution's cutoff time for processing transactions<sup>ccc</sup> determine the day on which, and the amount by which, a transaction will affect the amount of funds available in an account to cover other payments. Posting orders determine the sequence in which these calculations are made in a given day.

Financial institutions determine the order in which they process debit and credit transactions. Differences in the order in which various transactions are processed can affect the balances in an account after each transaction, including when in the sequence an account balance becomes insufficient to cover remaining items and when it becomes negative as a result of an overdraft.

---

<sup>bbb</sup> Preliminary analysis of transactional data from banks in the CFPB's overdraft study shows that a disproportionate number of payment transactions, including overdraft and NSF transactions, are posted on Mondays. This reflects the large number of transactions that may be initiated by consumers after Friday's cutoff and during weekend days. Because nightly posting is a batch process, institutions must define a point at which all subsequent transactions will be considered too late for the night's workload. Transactions received after this "cutoff time" are held for the next business day's nightly process. Cutoff times may vary by institution and by branch or collection of branches within a single institution.

<sup>ccc</sup> See previous footnote for explanation of cutoff times.

The earlier in a sequence that an account becomes negative, the more overdraft or NSF transactions may occur.

**Credits-Before-Debits:** All institutions that described their posting orders in response to the CFPB’s RFI and all study banks generally post deposits and other credits in accordance with the institution’s funds availability policy before debit transactions (primarily payments) during nightly processing.<sup>ddd</sup> Posting credits before debits, in comparison with alternative posting methods, increases the likelihood a consumer will have sufficient funds to cover debits that are processed in the nightly batch and therefore reduces the likelihood that a consumer will incur an overdraft or NSF fee.

**Ordering Debits by Type:** After posting deposits and other credits during nightly processing, institutions post debits in orders that vary significantly from one institution to another. Some institutions commingle all remaining debits including check, ACH, and settled ATM and POS items together for processing in a single batch. Others first categorize debits by different transaction types and process them in a sequence of sub-batches.<sup>eee</sup> Institutions following this latter approach may, for example, separate and process bank-initiated and pre-authorized (“cash-out”) transactions first. Bank-initiated transactions typically include returned deposits and accounting adjustments (*e.g.*, to correct errors made in prior postings). At some institutions, these may also include overdraft and NSF fees assessed on items processed the prior business day.<sup>fff</sup> Cash-out items are non-revocable transactions already authorized by the institution and generally include teller window and ATM cash withdrawals, cashiers’ checks, and wires. Although institutions are also liable for previously authorized POS debit card transactions, these are frequently processed separately. Among institutions that process in sub-batches, policies vary widely in the industry and also among the study banks regarding what types of debits are grouped into sub-batches and the sequence of the sub-batches. The order in which sub-batches are processed can affect which items – and how many – incur overdraft or

---

<sup>ddd</sup> The observed credits before debits industry “standard” applies to nightly processing only and pertains only to transactions received on the same calendar date.

<sup>eee</sup> Individual sub-batches may contain transactions of a single type or commingle multiple types of transactions as explained below.

<sup>fff</sup> Institutions also initiate monthly maintenance and other types of fees; however, these fees are generally not posted before customer-initiated transactions.

NSF fees when an account with a positive balance does not have sufficient funds to pay all of the debits in all of the batches.

**Ordering Debits by Transaction Size:** Some institutions may use additional or alternative approaches to order items within a batch (if all debits are batched together) or within sub-batches (if debits are processed by type). Posting smaller items before larger items (“low-to-high” processing) increases the probability that more items will be paid and fewer items will be assessed NSF or overdraft fees. Conversely, larger items may exhaust available funds earlier when posted before smaller items (*i.e.*, in a “high-to-low” manner) and increase the likelihood that more items will take the balance negative or post when it has already become negative. Some institutions vary how they order transactions by size within different sub-batches (*i.e.*, the same institution may order within one sub-batch low-to-high and within another sub-batch high-to-low).

Ordering debit transactions by size can have very different impacts, depending on whether the debits are commingled or grouped into sub-batches by transaction type. For example, if an institution processes cash-out and POS debit card transactions before check and ACH payments, it effectively processes smaller payments first because cash withdrawals and debit card POS payments are, on average, smaller than check and ACH payments,<sup>ggg</sup> even if transactions within each sub-batch are ordered from largest to smallest.

**Chronological and Serial Ordering:** Some transactions, such as POS debits and ATM transactions, carry a date- and time-stamp. Some institutions choose to use this information to separate and post these items chronologically. Similarly, some institutions process checks by check number and incoming ACH debits (including checks that were converted into ACH transactions by the merchants to whom the checks were written or the banks at which the checks were deposited) in the order in which they are received during the day.<sup>hhh</sup>

---

<sup>ggg</sup> Debit card transactions—whether executed across a PIN or signature network—tend to be smaller than checks and ACH payments. According to Nilson, the average industry-wide debit card transaction in 2010 was \$37, while checks averaged \$85 and ACH \$113. *See* The Nilson Report #985 (Dec. 2011).

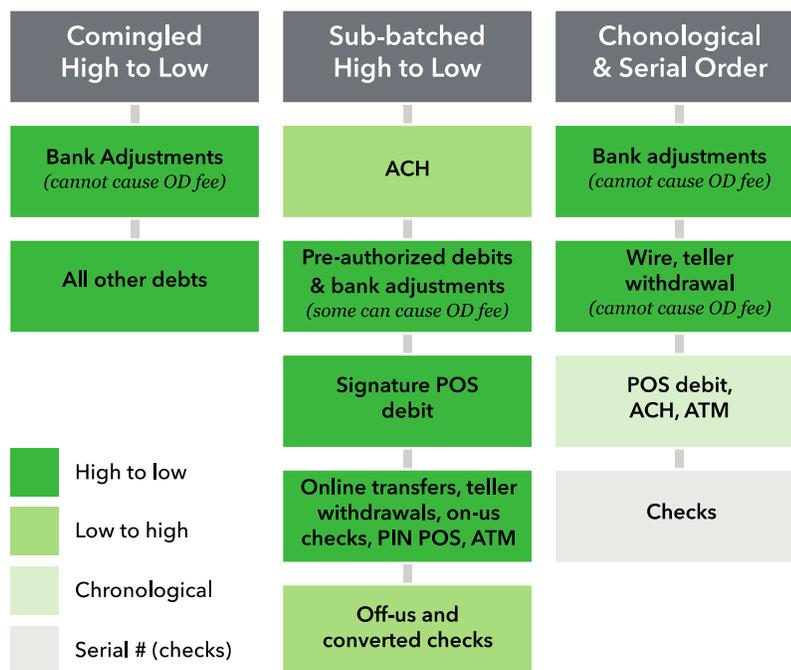
<sup>hhh</sup> Others may use the time that a payee deposited or cashed a check as a timestamp for the check writer, or will use the timestamp on a teller withdrawal if the institution has an online teller platform.

ACH transactions are received in batches, and these batches may contain both credit and debit transactions. Institutions generally receive multiple batches per day.

**Wide Variation in Debit Posting Orders:** Generally, the CFPB has found that debit posting orders vary considerably from institution to institution. No two participants in the study follow identical posting order policies, and financial institutions responding to the CFPB’s RFI described widely varying posting order policies as well.

Figure 11 below illustrates a range of possible ordering approaches. The “Commingled High-to-Low” approach has been adopted by a number of banks. The “Sub-Batched High-to-Low” example shows separation of debit items by transaction type and combines different methods for ordering transactions within batches. The “Chronological & Serial Order” example depicts a policy in which bank adjustments and cash-out items are ordered from highest to lowest amount, followed by all time-stamped debits ordered chronologically, and then by checks ordered by check number. In each of the methodologies, NSF and overdraft fees are assessed after the transactions post, either that night or the next morning.

**FIGURE 11:** ILLUSTRATIVE APPROACHES TO POSTING DEBITS BY TRANSACTION TYPE, SIZE, AND TIMING



There are many additional combinations of methodologies for batching transactions, sequencing sub-batches, and ordering items within sub-batches.

### **Intraday Processing and Other Processing Variations that Impact Posting Order:**

Some institutions post items on an intraday basis or outside of nightly processing. Institutions typically receive multiple batches of ACH transactions during a business day. These batches include both debits and credits.<sup>iii</sup> Some study banks process ACH transactions as they are received during the business day in lieu of or in addition to (for the day's final batch) processing these transactions at night with all other credits and debits. Some institutions that post transactions on an intraday basis effectively defer items that would otherwise result in an intraday overdraft to the end of the day to determine whether these items can be covered with later-arriving credits. Other institutions similarly process teller withdrawals and PIN network transactions intraday as they occur. The processing of transactions at the time of execution is called "real-time processing."

Additionally, some banks that process solely at night may distinguish items that occurred after the cutoff time on the previous day from current day items in their processing. For example, these institutions may prioritize and first process prior day credits, then prior day debits, current day credits, and finally current day debits. This practice and intraday and real-time processing all cause some debits to post before credits. Thus, these processing approaches may cause consumers to incur more NSF or overdraft transactions; however, some institutions implement end-of-day adjustments that effectively post credits before debits.

## **5.3 Overdraft Coverage Limits and Making Pay/Return Decisions**

Once an institution determines that an account has insufficient funds to cover a check or ACH payment, it must decide whether to pay the item or return it.<sup>iii</sup> This decision is similar to the decision to authorize or decline a transaction that a consumer attempts at an ATM or point of sale but occurs during the posting process instead of in real time throughout the day. A paid check or ACH overdraft item can result in an overdraft fee. A returned check or ACH item can

---

<sup>iii</sup> ACH debits include checks converted to ACH transactions at points of sale.

<sup>iii</sup> As discussed below, most institutions allow consumers the opportunity to link their checking account to another deposit or credit account at the bank. Where a consumer elects to do so, the pay/return decisions are made only after funds in the linked deposit account, or the credit limit on the linked credit account, have been exhausted.

result in an NSF fee (typically of the same amount as an overdraft fee).<sup>kkk</sup> Institutions employ a number of different practices and policies when making these pay/return decisions.

As automated processes are necessary for institutions that choose to authorize or decline ATM and POS transactions that will overdraw an account, many institutions—including study banks—use these same processes to make pay-return decisions for check and ACH transactions. These institutions generally run programs that assign to each account a limit as to the amount of overdraft coverage the institution is willing to extend. For accounts that have opted in to ATM and POS debit overdraft coverage, when a request for authorization is received that exceeds the available funds, the bank will determine whether to authorize the transaction by reviewing it against the assigned overdraft coverage limit. Similarly, in nightly (or intra-day) posting, the bank will review potential NSF and overdraft items against the assigned overdraft coverage limit.<sup>lll</sup> Items processed during nightly (and intra-day) posting will generally be paid up to the coverage limit; once the account's limit is reached, subsequent items will be returned unpaid.

The order in which items are posted may affect not only the number of overdraft fees assessed but also the likelihood of particular items being returned and potentially assessed NSF fees. The frequency with which this occurs may be ascertainable through our future analysis of the account-level data from the study banks.

**Setting Overdraft Coverage Limits:** Generally, institutions that set overdraft coverage limits assign a single limit to each account and use that account limit for making decisions regarding check and ACH transactions during nightly processing as well as for authorizing ATM and POS debit card transactions for those accounts opted in for overdraft coverage on these items.

Overdraft coverage limits may be static (*i.e.*, the institution assigns an unchanging limit to each customer) or dynamic (*i.e.*, the limits are calculated and may vary for each account and over time). Static limits vary among institutions that employ them, and may range from under \$100

---

<sup>kkk</sup> ATM and POS debit card transactions are excluded because they are authorized at the time the consumer conducts the transaction and typically declined when rejected; thus, these items do not get presented for pay/return decisioning.

<sup>lll</sup> For example, if an account has insufficient funds to pay one or more items and an institution has determined it will provide up to \$500 of overdraft coverage on the account, the institution's automated process will pay items that take the account balance negative by as much as \$500.

to well over \$1,000. Some institutions employ different static limits for different checking account products, while others assign the same limit to all customers.

Dynamic limits, in contrast, vary by account and may change periodically as an accountholder's usage or relationship to the institution changes. Many institutions set dynamic limits based on a "matrix" or set of formulas that weigh various account and accountholder characteristics in an attempt to manage more precisely account credit risk, overdraft program revenues, and customer retention. These characteristics commonly include account tenure, average balance, overdraft history, and deposit patterns as well as other relationships the accountholder may have with the institution.

Limits assigned to accounts at institutions using dynamic overdraft limits may change over time as an accountholder's usage patterns and relationship to the institution change. Thus the distribution of limits assigned to accounts by an institution may change based on changes in policy, customer behavior, and market conditions that affect both, and banks report periodically evaluating and adjusting their algorithms for setting dynamic coverage limits. While many large institutions use dynamic limits, the more frequent performance monitoring that dynamic models require may strain resources at smaller institutions. Perhaps as a result, many smaller institutions maintain static limits.

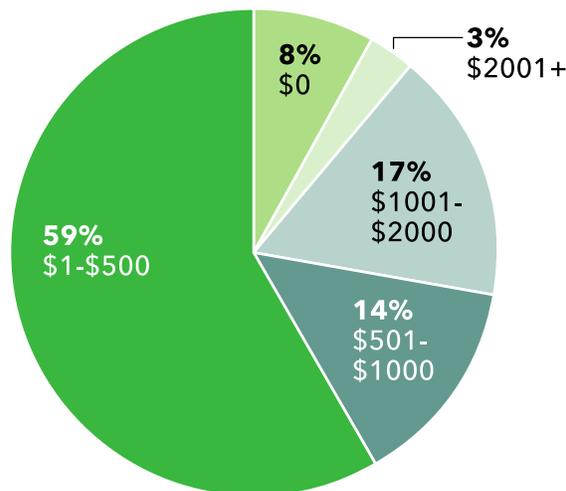
Institutions that use dynamic limits generally do not communicate these limits to accountholders. This is true for all study banks that use dynamic limits. Some institutions that use static limits communicate these limits to accountholders.

**Distribution of Overdraft Coverage Limit Amounts:** For consumers who have opted in to ATM and POS debit card overdraft coverage, the size or amount of the overdraft coverage limit assigned to a consumer's account will determine the point at which the institution ceases to authorize such transactions. Thus, for accounts opted in for overdraft coverage on ATM and POS debit card transactions, lower overdraft coverage limits generally result in more declined attempts and fewer approvals, and consequently, fewer overdrafts as a result of these types of transactions. The size of the overdraft coverage limit will also affect the point at which the bank commences to return check and ACH items. Thus, for these types of payments, lower overdraft coverage limits generally result in more NSF transactions and fewer overdraft transactions.

Figure 12 depicts the aggregated distribution of coverage limits of study banks as of June 2012. Close to 60% of accounts had overdraft limits ranging from \$1 to \$500; for many study banks, these limits fall below the maximum limit that the banks' prescribe. Approximately 8% of

accounts—including but not necessarily limited to new accounts, second chance accounts, accounts deemed to present high risks of not repaying negative balances, and accounts receiving protected (*e.g.*, garnished) funds—were accorded no overdraft coverage. Most study banks indicated that they cap their coverage limits between \$1,500 and \$2,500, and several reported that they had recalibrated their matrices since 2010, lowering their maximum calculated overdraft coverage limit by \$2,000 or more.

**FIGURE 12:** OVERDRAFT COVERAGE LIMITS FOR ACCOUNTS AT STUDY BANKS, JUNE 2012



**Variations in Overdraft Limits by Bank:** Average coverage limits, and the range of limits among banks with dynamic limits, varied by study bank. Most study banks quoted average coverage limits ranging between \$500 and \$1,000. Some, including banks with dynamic overdraft limits, assign the same limit to most accounts. Most study banks, however, assigned a greater diversity of overdraft limits, with higher maximum coverage amounts and accounts assigned limits across the range between the maximum and \$0. These variations in policies with respect to setting overdraft coverage amounts stem from differences in the factors used to calculate dynamic limits and willingness to tolerate exceptions, such as manually assigned overdraft limits for legacy accounts.

**Manual Overrides:** Most institutions with automated overdraft programs make at least some pay/return decisions manually. Institutions with such hybrid pay/return processes flag some of the automated decisions for review by staff with manual override authority. These reviewers apply institutional guidelines that incorporate customer service and fraud detection

considerations to decide whether to pay or return potential overdraft items. The institutions monitor these manual overrides and measure performance relative to fee income, credit losses, and customer attrition.

Additionally, study banks reported that they may “hard code” high overdraft coverage limits—for example, at \$5,000 or more—and override their standard overdraft limits for small numbers of relatively low risk consumer accounts. Similarly, upon suspicion of fraudulent transactions, some study banks may temporarily restrict an account’s overdraft limit to \$0.

## 5.4 Charge/No-Charge Decisions, Waivers, and Refunds

Once a decision is made to pay an item for which there are insufficient available funds, the institution then must determine whether to charge an overdraft fee with respect to that item. Similarly, once a decision is made to return an item for which there are insufficient available funds, the institution must determine whether to charge an NSF fee with respect to that item.

**Variations in Per-Item Fees:** Most institutions charge the same amount for an NSF item as they do for an overdraft item and generally do not vary the fees based upon the size or nature of the item. Data obtained from a research firm that actively obtains and tracks information on deposit account fee schedules at hundreds of institutions<sup>mmmm</sup> indicates that the median NSF and overdraft fees among the 33 largest institutions it monitors—all of whom were in the top 50 in terms of U.S. deposit market share<sup>nnn</sup>—were both \$34 in 2012. The 10<sup>th</sup> percentile NSF/overdraft fee of these same institutions was \$25 in 2012, while the 90<sup>th</sup> percentile fees were both \$36.<sup>37</sup>

Data from the same research firm suggests fees are lower at many smaller institutions. The median NSF and median overdraft fee across nearly 800 smaller banks and credit unions (outside of the nation’s 50 largest depositories) were both \$30 in 2012. However, per-item fees ranged across this sample from a low of \$10 to a high of \$45.<sup>38</sup>

---

<sup>mmmm</sup> Including at least the top five institutions ranked by deposit market share in each of the 50 states.

<sup>nnn</sup> Per analysis of FDIC data as of June 30, 2012.

Some institutions adjust the fee amount based upon the volume of incidents incurred on the account, a practice called “tiering.”<sup>ooo</sup> Nine of the 33 largest banks monitored by the research firm utilized tiered NSF/OD fee structures in 2012, and the research firm has indicated that tiering was more prevalent across the industry a few years ago than it is today. Separately, some institutions charge a reduced fee or automatically waive the first fee incurred by a new account, or the first fee incurred by any account in a new calendar year. Separately still, some institutions charge a lower fee on overdraft items below a set dollar amount. Other institutions assess reduced fees on accounts designated for special populations, such as students or military personnel.

### **Fee Waiver Policies, Including Fee Caps, *De Minimis* Waivers, and Forgiveness**

**Periods:** Twenty-four of the 33 largest institutions monitored by the same research firm in 2012 capped the number of NSF and overdraft fees an account may be assessed per day, and the median cap among these 27 institutions was five total items. Notably, these caps ranged considerably among even this sample of institutions. The institution with the lowest cap limited the number of overdraft and NSF fees that can be charged in a day to a total of two, while the institutions with the highest allowed a combined total of as many as 12 overdraft and NSF fees in a given day.

Institutions may implement *de minimis* policies on a per-transaction or net-balance basis. The former approach prevents overdraft fees on small-dollar items. The latter method restricts overdraft fees when a balance is driven only nominally negative by the sum of items posted that day.<sup>ppp</sup> Net balance thresholds are more common across the CFPB’s study banks than per-transaction thresholds. Twenty-one of the largest 33 institutions tracked by the research firm had *de minimis* policies in 2012, and the median threshold was \$5 (includes both per transaction and net balance thresholds). The median threshold was \$5 in 2012 for smaller institutions monitored by the research firm, as well.

Institutions may employ additional means of limiting overdraft fees. For example, one or more institutions offer forgiveness periods following a day in which an account has gone negative during which consumers can make compensating deposits (subject to these banks’ funds

---

<sup>ooo</sup> Institutions that tier generally assess a higher fee for second and subsequent NSF and overdraft incidents. The median and percentile NSF and overdraft fee figures quoted are for first incidents only.

<sup>ppp</sup> In layman’s terms, *de minimis* thresholds prevent instances in which a consumer may be charged a \$35 fee overdrawing his or her account while buying a \$3 cup of coffee.

availability rules) and avoid being charged an overdraft fee. In general, a forgiveness period allows a consumer time after an overdraft has occurred to deposit sufficient available funds (or provide time for a payroll or other automatic deposit to post) to bring the consumer's account balance positive. If the consumer sufficiently raises his or her balance within the forgiveness period, the assessed overdraft fees would be waived.

**Sustained or Extended Overdraft Fees:** Some institutions charge a fee for accounts that remain at a negative balance beyond a specified period of time. These “sustained” or “extended” overdraft fees typically do not depend upon the number of items that caused an account to overdraft. Instead, these fees are assessed on a one-time or periodic basis when an account's balance has remained negative for a specified period of time after one or more overdrafts have occurred. Twenty-one of the top 33 institutions in the research firm's database charged a sustained or extended overdraft fee in 2012.<sup>39</sup>

The frequency of these fees range from daily to weekly or one-time fees assessed while an account's balance remains negative. Institutions generally wait between two and 10 calendar days before assessing fees. Among large banks monitored by the research firm in 2012, an account with a negative balance that was repaid on day five may have been charged between \$5 and \$38.50 for sustaining a negative balance. An account that remained overdrawn for 20 days could have been assessed fees ranging from \$15 to \$140. This wide range of fee assessments generally holds true for any overdrawn balance exceeding an institution's *de minimis* threshold.

## 5.5 Linked Account Overdraft Protection, Alerts, and Other Programs to Limit Overdrafts

Most institutions — including all study banks — provide some form of overdraft protection that enables consumers to avoid overdrawing their accounts and incurring NSF or overdraft fees. These largely involve linking a checking account to a savings account, a line of credit, or a credit card account from which funds are transferred automatically to cover payments when the checking account balance is too low to cover them. Institutions generally charge fees for these overdraft protection transfers.

**Linked Account Overdraft Protection:** The research firm referenced in Section 5.4<sup>40</sup> determined that in 2012, 90% of the institutions the firm monitored offered some sort of linked

credit line for overdraft protection.<sup>q99</sup> Linkable credit products may include dedicated overdraft lines of credit—*i.e.*, lines that are only accessible by overdrawing the associated checking accounts—as well as multipurpose personal lines of credit, credit cards, and home equity lines of credit. Use of such linked credit accounts to cover overdrafts results in finance or interest charges to the consumer, rather than fixed overdraft fees.

Deposit accounts, including savings accounts or additional checking accounts, can also be linked to a checking account for overdraft protection. Banks in the CFPB’s study generally offered some mix of multiple linkable account options, including both deposit and credit options.

Most institutions assess a fee in at least some circumstances when funds from a linked account are automatically transferred for overdraft protection.<sup>rrr</sup> Twenty-eight of the 33 largest institutions monitored by the research firm in 2012 charged a transfer fee, with these fees ranging from \$3 to \$20 per transfer; the median fee among this population was \$10. Less than three-quarters of the smaller institutions monitored by the same research firm assess a transfer fee, and for these institutions, the median fee was comparatively less at \$5.<sup>41</sup> Many institutions with *de minimis* thresholds for assessing overdraft fees apply these same thresholds when determining whether or not to assess a linked account transfer fee.

Linked accounts may have other costs associated with them. For example, some institutions charge an annual or monthly fee on lines of credit. Credit products also carry an interest rate that is applied to outstanding balances. Linkable deposit accounts may be subject to monthly maintenance requirements and fees, as may some of the consumer checking accounts to which they are linked. Some banks in the CFPB’s study offer free (no minimum balance) linkable savings accounts, while others require a minimum balance or monthly fee.

Some institutions only transfer funds when the transferred sum is sufficient to cover the sum of all overdrafts. Others may transfer enough to cover a portion of the overdrawn balance even if there are insufficient funds in a linked deposit account, or insufficient available credit in a linked

---

<sup>q99</sup> The research firm’s penetration figures closely resemble the FDIC’s own findings in their 2011 Survey of Banks’ Efforts to serve the Unbanked and Underbanked; *i.e.*, 92% of banks with assets above \$38 billion, 94% of banks with assets between \$1 billion and \$38 billion, and 85% of banks with assets less than \$1 billion reported having linked-account programs to the FDIC. See 2011 FDIC Survey of Banks’ Efforts to Serve the Unbanked and Underbanked, p.16 (Dec. 2011).

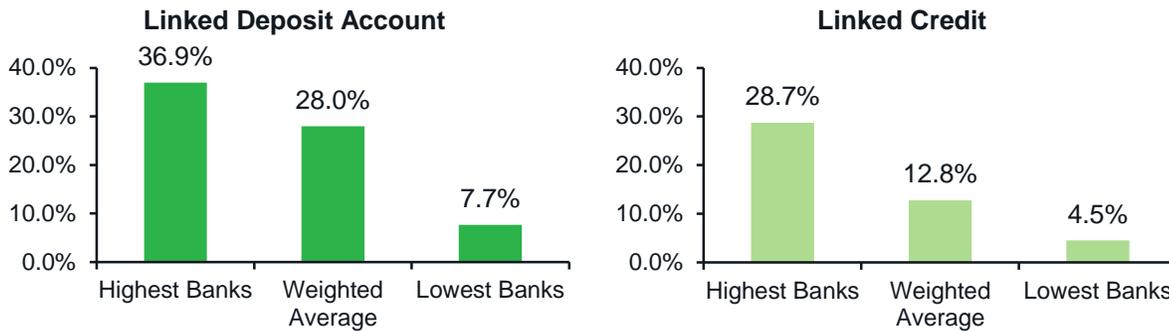
<sup>rrr</sup> Some institutions waive these fees when the service is linked to certain types of accounts.

credit account, to cover the full overdrawn balance. When the available funds or credit from linked accounts are depleted, institutions may charge a fee for the overdraft or NSF transactions that may subsequently occur. Thus, consumers may incur both transfer fees and overdraft fees in the same day.

Institutions also differ in how much money is swept when an automatic overdraft transfer is initiated. Some institutions transfer the exact amount needed to reset the account balance to \$0, while others transfer in \$50 or \$100 increments. In addition, some institutions implement a minimum transfer amount, and these amounts may vary. Rounding up the transfer amount may help to cover additional payments and prevent additional overdraft occurrences or additional transfer fees. On the other hand, transferring an exact amount avoids finance charges (in the case of lines of credit) in excess of what the consumer requires. Some institutions utilize both approaches by rounding up for transfers from linked deposit accounts but moving only the exact amount when transferring from a linked credit account.

**Penetration of Linked Account Overdraft Protection:** Among the study banks, the share of consumer checking accounts linked to other deposit accounts for overdraft protection in 2011 ranged by 37.5 percentage points. The weighted average percentage of accounts linked to another deposit account for overdraft protection at the end of 2011 was 28.0%. The percentage of open accounts linked to a credit account was lower at 12.8%, with penetration rates ranging by 24.8 percentage points across different banks in 2011. The charts below shows linked account penetration at the study banks by linked account type. Among other things, the variation in take-up rates among study banks reflects different strategies for promoting such services to accountholders, the length of time different banks have been offering the service, and possibly differences in customer behavioral characteristics and preferences across banks.

**FIGURE 13:** ACCOUNTS WITH LINKED ACCOUNT OVERDRAFT PROTECTION AT STUDY BANKS IN 2011<sup>sss</sup>



**Online and Text Alerts:** Consumers who use online or mobile banking and are at risk of overdrawing their accounts may sign up for services that some institutions introduced to help them recognize or be notified when their account balances are low. An industry research firm estimates that 61% of adult internet users used online banking services in 2011,<sup>42</sup> and survey findings from the Board indicated that 68% of consumers with a bank account and regular internet access used online banking in the year prior to March 2012.<sup>43</sup> Penetration of online banking use varies considerably among study banks, however, and some study banks estimated that over half of their consumer checking account holders were actively banking online as of the end of 2011.<sup>ttt</sup>

Use of text alerts appears to remain moderately low and varies by institution. Some institutions do not currently offer text alerts while others have only recently introduced the services. Several small institution respondents to the CFPB’s RFI that do not provide alerts indicated cost to be their primary reason for not doing so. Among study banks offering the service, the percentage of open accounts enrolled to receive low balance text alerts at the end of 2011 ranged by over 25

<sup>sss</sup> Figure 13 displays unweighted averages of the two study banks with the highest linked account rate (“Highest Banks”) and of the two study banks with the lowest linked account rate (“Lowest Banks”). The “Weighted Average” bars display the averages across all study banks included in the analysis, weighted by each bank’s number of accounts at the end of 2011.

<sup>ttt</sup> “Actively banking online” is defined to be using within the past 30 days. Note that penetration rates are often difficult to compare across institutions due to measurement challenges; some accounts have multiple user IDs (*e.g.*, joint accounts with separate account holder credentials) and some user IDs pertain to multiple accounts (*e.g.*, a customer with multiple checking accounts).

percentage points.<sup>uuu</sup> As with linked account overdraft protection, among other things, the variation in take-up rates among study banks may reflect different strategies for promoting such services to accountholders, the length of time different banks have been offering the service, and differences in customer behavioral characteristics and preferences across banks.<sup>vvv</sup>

Multiple study banks and RFI respondents assert that provision of alerts and online banking does not always lead to significant changes in overdraft behavior and that many consumers overdraft despite monitoring their accounts frequently.

## 5.6 Accountholder Behavioral Characteristics and Screening Policies

While many of the differences between banks with respect to overdrafts—such as in consumers’ incidence of overdrafts and related costs, election of overdraft coverage on ATM and debit card transactions, and enrollment in overdraft protection programs—stem from differences in banks’ overdraft-related policies and practices, these differences in outcomes may also reflect differences in the behavioral characteristics of the banks’ accountholders. Institutions influence the mix of consumers they attract through their marketing, distribution, product management, and risk management strategies and execution.

For example, institutions often target specific consumer segments when seeking to attract new customers. Likewise, institutions design and price products to appeal to and meet the needs of different types of consumers. The location of an institution’s service area and branch network can influence to a considerable extent the kinds of customers it most frequently serves. Different consumer segments are likely to bring different needs and preferences with respect to their use of checking accounts and their need or propensity to use overdraft coverage.

---

<sup>uuu</sup> Again, precise measurement is difficult as some joint accountholders may subscribe to receive alerts for a single account.

<sup>vvv</sup> Note that at many institutions, consumers may sign up for text alerts even if they retain paper statements.”

Institutions' policies for screening new account applicants for credit or charge-off risk and to qualify applicants for specific products<sup>www</sup> may also play some role in determining the make-up of accountholders and their likely overdraft incidence, fees, and related account closures. Study banks varied considerably in whether and how they used consumer reporting agencies that track and report on past checking account histories and closures, or reports and credit scores from the national credit reporting companies, to screen for charge-off risk. Some study banks deny new accounts to applicants with a recent history of involuntary account closure and charge-off; others utilize credit scores in lieu of or in conjunction with involuntary account closure data to assess new checking account applicants; still others apply few or no credit risk criteria when screening new accountholders.<sup>xxx</sup> These different approaches to account screening may result in differences in the consumers who hold accounts, and thus explain some portion of the differences across institutions in the numbers of customers who carry low balances or manage their accounts in ways that put them at risk of incurring overdrafts or of experiencing involuntary closures.

---

<sup>www</sup> As noted earlier, some study banks offer consumers who do not qualify for standard checking account products safer, somewhat restrictive products that limit institutional (and consumer) exposure to credit risk.

<sup>xxx</sup> Institutions must also comply with the Bank Secrecy Act and meet the Customer Identification Program requirements set out in Section 326 of the USA PATRIOT Act. The study banks also all reported screening for fraud risk and withholding accounts from consumers with prior involuntary closures due to fraudulent use of their accounts.

## 6. Conclusion, Open Questions, and Further Research Steps

As noted at the outset, in launching the CFPB's study of overdraft programs, CFPB Director Richard Cordray emphasized that the CFPB is "committed to being a data-driven agency" and therefore was seeking to learn "the facts and figures" about "actual consumer experiences and the consequences of different overdraft practices" as well as about "how well [consumers] are able to learn about the costs and risks of overdrafts."<sup>44</sup> The findings reported in this white paper begin to shed important light on consumer experiences with overdraft programs as well as institutional practices.

To begin with, it appears that the Board's "opt-in" amendments to Regulation E have made a material difference in the experience of some consumers. First, most accountholders at CFPB study banks did not opt in for overdraft coverage on ATM/POS debit card transactions. As of the end of 2011, the percentage of accounts opting in among study banks that offer this option were 16.1% for all accounts and 22.3% for accounts that were opened during 2011. Second, while heavy overdrafters demonstrated higher propensities to opt in than infrequent users of overdraft, most appeared not to have done so when first given the chance in 2010. Third, heavy users of overdraft who had not opted in as of the end of 2010 experienced a 63% reduction in their overdraft and NSF costs, on average, between the first half of 2010 and the second half of the same year.

But while the Regulation E amendments have had a material impact, and while institutions have made other changes with respect to overdraft practices, overdraft fees still represent a sizable portion of the fee revenue generated by consumer checking accounts—approximately 61% among the study banks. Overdraft and NSF fees also compose 37% of study banks' total deposit service charges and a recent trade association survey found that overdraft and NSF fees make up an even larger share—over 60%—of total deposit service charges among community banks.

Furthermore, the same trade association survey found overdraft and NSF fees to compose 27.5% of respondent net income after taxes.

Moreover, the concerns identified by the FDIC in its earlier study continue to persist: there remains a small but significant segment of consumers at the banks participating in this study who continue to incur a large number of overdraft and NSF fees. These consumers are paying substantial sums to access this instant liquidity and maintain their checking accounts. Accounts with more moderate overdraft use may also pay hundreds of dollars in fees per year.

A subset of consumers—who may or may not overlap with those that incur large numbers of overdraft and NSF fees—had their accounts closed involuntarily after overdrawing and sustaining negative account balances for an extended period of time. In 2011, 6.0% of accounts that were open at the beginning of the year or that were opened during the year at banks in the CFPB’s study resulted in involuntary closures. Involuntary closure is of particular significance because consumers who have had their accounts involuntarily closed are likely to be rejected for new accounts at many institutions.

In addition to the high costs that many consumers are paying, what is most striking in the data is the variation in consumer experiences and outcomes that we have observed. This is true along a substantial number of the dimensions we have measured. For example:

- The proportion of consumer checking accounts that were heavy overdrafters (incurring more than 10 NSF or overdraft transactions in 2011) to all accounts with at least one overdraft or NSF transaction ranged by as much as 4.4 percentage points across study banks using similar measurement methodologies.
- The mean overdraft fees paid by accountholders who incurred at least one NSF/OD item in 2011 varied by over \$201 across the study banks.
- The highest involuntary account closure rate observed in the study was 14 times the involuntary closure rate at the bank with the lowest rate.
- The opt-in rate among accounts opened in 2011 varied from single-digit percentages to over 40% across study banks; opt-in rates among existing accounts ranged similarly, though to slightly less extremes. Among existing customers who were heavy overdrafters before Regulation E changes were implemented, opt-in rates varied by over 50 percentage points at the end of 2010.

- Among the study banks, the share of consumer checking accounts linked to other deposit accounts for overdraft protection in 2011 ranged by 37.5 percentage points; rates of use of linked credit account overdraft protection also ranged dramatically.

In theory, the variations in outcomes that we have observed could be attributable purely to differences among the customers served by the various banks and those customers' needs and preferences. Bank accountholder eligibility requirements and targeting practices may result in different consumer profiles among institutions.

However, it is likely that the variations we observe are attributable, at least in substantial part, to differences in other practices and policies among institutions. For example, at some institutions, only a small fraction of new accountholders elected to opt in. At others, a much greater percentage elected to do so. This suggests that institutions are describing or selling overdraft options differently to new customers. Similarly, the remarkable variation in opt-in rates among existing customers in 2010 who had been heavy overdrafters may reflect known differences in marketing approaches.

Even among those who have opted-in or opted out, we find wide variations in outcomes across the study banks. Our study shows that a large number of factors may determine whether an institution will deem the funds in an account insufficient to cover a payment or withdrawal, and whether it will assess a fee with respect to such an item. These include:

- The institution's funds availability policy;
- How the institution calculates a consumer's available balance;
- The institution's policies for setting overdraft limits;
- The institution's posting practices, including when posting occurs (real-time, intra-day, or at night), whether transactions are commingled or posted in sub-batches by transaction type, and the ordering of transactions within batches; and
- The institution's policies with respect to assessing fees, including caps on the number of fees, fee cushions or waivers on *de minimis* transaction amounts or balances, forgiveness periods, and extended overdraft fees.

These factors vary from institution to institution, are complex and interact in complex ways, and may influence the number of overdraft or NSF fees a consumer is charged. Frequently, several of

these factors are not disclosed to consumers (*e.g.*, overdraft coverage limits) or are disclosed in a technical manner that may not be readily understandable. Moreover, some consumers may incorrectly transpose a set of expectations regarding bank processes from one institution to the next. All of this raises questions about the degree to which even the most sophisticated consumer could readily anticipate and manage the cost of engaging in a series of transactions at one institution or compare the cost of overdrafting at different institutions.

Nothing in this report implies that banks and credit unions should be precluded from offering overdraft coverage. Additionally, our study notes progress in some areas in recent years in protecting consumers from harm. Nonetheless, our findings with respect to the number of consumers who are incurring heavy overdraft fees or account closures and the wide variations across institutions indicate that certain practices and procedures merit further analysis to determine whether they are causing the kind of consumer harm that the federal consumer protections laws are designed to prevent. The CFPB will continue its study of overdraft programs, including through analysis of account-level data, to examine the extent to which particular policies magnify risks to consumers. This analysis will help the CFPB assess whether further action is warranted to implement and enforce federal consumer protection law consistently so as to ensure that the market for consumer financial products and services is fair, transparent, and competitive and that consumers are empowered to take more control over their economic lives.

# Glossary

**ACH (ACH transaction)** – An electronic fund transfer made between institutions across what is called the Automated Clearing House network. ACH is used for all kinds of fund transfer transactions, including direct deposit of paychecks and monthly debits for routine payments. Merchants often enable consumers to pay bills via ACH by providing an account number and bank routing number.

**Alert (account alert)** – Email or text message sent by an institution to an enrolled deposit accountholder to notify of account or transaction status; for example, that the account’s balance has dropped below a certain threshold or that a scheduled payment has been made.

**ATM** – Automated teller machine; enables account access, including balance inquiries, withdrawal of funds, deposits, or account transfers, typically with debit card and PIN credentials.

**Authorization** – Decision by the institution to pay or allow a debit card transaction. Generally distinct from transaction settlement. Authorizations typically reduce funds available to the consumer.

**Automated Overdraft Program** – A program in which a financial institution determines whether to authorize or decline items presented against insufficient funds via a computer algorithm and an overdraft coverage limit for each account. Overdraft coverage limits used in these programs may be dynamic (calculated) or static.

**Available Balance (available funds)** – The balance used to determine whether the account holds sufficient funds for an authorization; calculated by subtracting outstanding debit card authorizations and holds on deposited funds from the ledger balance.

**Batch Processing (nightly batch processing or nightly processing)** – End of day debiting of received authorizations, crediting of deposits, and debiting of transactions received

and presented for posting against the account ledger balance. This is the process in which pay/return decisions are made for check and ACH transactions.

**Charge Off** – Write-off of a past-due debt or negative balance deposit account. When an account is charged off, the account is closed and eligible for collections.

**Charge/No Charge Decision** – Decision by an institution whether to assess a fee on an NSF or overdraft item.

**Commingled Debits** – Mix of different types of debit (payment) transactions for the purpose of making pay/return decisions and posting to a deposit account general ledger. For example, an institution might mix ACH and check transactions, rather than posting all of the ACH transactions before posting the checks.

**Cutoff Time** – Point in time during a business day at which all subsequent transactions will be considered too late for the night's batch processing. Transactions received after the cutoff time are held for the next business day's nightly process.

**De Minimis** – Threshold that determines whether NSF/OD items are assessed a fee. Institutions may implement *de minimis* policies on a per-transaction or net-balance basis. The former approach prevents overdraft fees on small-dollar items. The latter method restricts overdraft fees when a balance is driven only nominally negative by a posted item.

**Extended Overdraft Fee (sustained overdraft fee)** – A fee assessed on accounts that remain at a negative balance beyond a specified period of time. These fees may be applied on a one-time or periodic basis after an overdraft has occurred and do not typically depend upon the number of items that caused an account to overdraft.

**Fee Cap** – Limit to the number of NSF and overdraft fees an account may be assessed per processing day. Often expressed as a threshold dollar amount but could be specified in terms of items.

**Funds Availability Policy** – Terms by which an institution agrees to enable depositors to access—*i.e.*, withdraw, make payments from, or transfer—deposits made to an account. The Federal Reserve Board's Regulation CC specifies minimum funds availability requirements for banks.

**Forgiveness Period** – Time allowed after an item is paid into overdraft during which consumers can make compensating deposits and avoid being charged an overdraft fee.

**Hold (hold on deposit)** – Designation of some or all of a deposit amount to be unavailable to a depositor to fund a withdrawal, payment, or transfer. Generally represented as a temporary debit and offset to a deposit amount credited to an account balance.

**Hybrid Overdraft Program** – Automated overdraft programs in which certain pay/return or charge/no charge decisions are subsequently reviewed and may be overridden by bank or credit union staff.

**Intraday Processing** – Posting of transactions to the ledger balance outside of nightly processing; usually as certain transactions are received.

**Involuntary Account Closure** – Termination of a customer account agreement initiated by the institution. Could include both credit and fraud charge offs.

**Ledger Balance** – The net sum of all cleared credit and settled debit transactions executed against an account.

**Manual Overdraft Program** – A program in which bank or credit union staff review and determine whether to pay or return each item presented against an account with insufficient funds. Manual overdraft programs do not enable timely decisions on ATM and POS debit card transactions; as a result, institutions with manual programs generally do not offer overdraft coverage on these transactions. Manual overdraft programs are often ad hoc as staff may not review every item presented against accounts with insufficient funds.

**Memo Posting** – Intraday accounting (debiting and crediting) of transactions and debit card authorizations to an account's available balance.

**NSF (non-sufficient funds)** – A debit transaction (payment or withdrawal) that if paid would exceed the account balance, and is instead returned unpaid by the institution.

**NSF Fee** – Fee an institution assesses for an NSF item.

**Opt-in** – Affirmative consent received for a consumer account to enable the institution to allow the account to overdraw via POS (non-recurring) debit card or ATM transactions. Such consent is required per Regulation E.

**Overdraft** – A debit transaction (payment or withdrawal) that exceeds the consumer's account balance and is paid (covered) by the institution.

**Overdraft Coverage Limit** – Amount by which an institution with an overdraft program is generally willing to let a consumer’s account go negative. Many institutions do not disclose coverage limit amounts to accountholders.

**Overdraft Fee** – Fee imposed by an institution for covering an overdraft item. Some institutions vary or tier overdraft fees based upon item amount or prior overdraft activity. Some overdraft items are not assessed fees due to waiver policies.

**Linked Account Overdraft Protection** – A service that allows a consumer to link a checking account to a savings account, another personal checking account, a line of credit, or a credit card account from which funds are automatically transferred for a fee to cover payments when the checking account balance is otherwise too low to cover them.

**Pay/Return Decision** – Decision by an institution whether to cover an overdraft or return an NSF when an item exceeds the consumer’s account balance.

**PIN Debit** – Debit card transaction in which a consumer uses a personal identification number for security purposes. PIN debit card transactions almost always settle the same business day they are authorized (or the next business day if executed on a non-business day).

**POS Debit** – A debit card transaction conducted at a merchant’s physical terminal or point of sale. A consumer may authorize a POS debit with a PIN or signature.

**Posting Order** – The sequence in which credit and debit items are presented (for making pay/return and charge/no charge decisions) during batch processing. For high-to-low posting order, an institution presents transactions from largest to smallest amounts; the reverse is true for low-to-high posting orders. Orders may also be chronological (based upon transaction date and time) or serial (by check number), as applicable.

**Real-time Processing** – Posting of credits and debits to the account ledger balance at the time these transactions are received or executed. Institutions may process in real-time transactions received intraday rather than during nightly batch processing.

**Service Charges on Deposits** – Federal banking agency Call Report (quarterly bank reporting of financial performance and status) line item that includes consumer NSF and overdraft fees. This line item also includes other fees charged against deposit accounts, including monthly maintenance fees, stop payment fees, fees for customers using foreign ATMs, etc., as well as charges to non-consumer deposit accounts.

**Settlement (transaction settlement)** – Disbursement between institutions, usually through debiting and crediting of institutional account balances, to cover individual customer payment transactions.

**Signature Debit** – Debit card transaction in which a consumer often signs his or her name to validate the transaction. Many terminals, including those at gas pumps or automatic fuel dispensers, do not require an actual customer signature. Signature debit card transactions generally settle one to two business days after authorization.

**Transaction** – Payment, withdrawal, deposit, or institution adjustment on a consumer checking account such as an interest credit or fee.

**Transfer Fee (sweep fee)**– A fee charged by an institution to automatically move funds from a linked account to a checking account to cover a debit transaction that exceeds the checking account balance.

**Waiver** – Absence of a fee charge for an NSF or overdraft item. May be the result of a fee cap, *de minimis* policy, forgiveness period, other policy, or manual override.

# Notes

---

<sup>1</sup> Richard Cordray, Director, CFPB, Remarks at the CFPB Roundtable on Overdraft Practices (Feb. 22, 2012), *available at* <http://www.consumerfinance.gov/speeches/prepared-remarks-by-richard-cordray-at-the-cfpb-roundtable-on-overdraft-practices>.

<sup>2</sup> *Id.*

<sup>3</sup> *See* Impacts of Overdraft Programs on Consumers, 77 Fed. Reg. 12031 (Feb. 28, 2012), *available at* <http://www.gpo.gov/fdsys/pkg/FR-2012-02-28/pdf/2012-4576.pdf>.

<sup>4</sup> Bureau analysis of FDIC and NCUA data obtained through SNL Financial LC.

<sup>5</sup> *See, e.g.*, Comments to the Office of the Comptroller from the Center for Responsible Lending, Proposed Guidance on Deposit-Related Consumer Credit Products (Aug. 8, 2011); Guidance on Deposit-Related Consumer Credit Products, Docket ID OCC-2011-0012 (Proposed guidance), 76 Fed. Reg. 33409 (June 8, 2011) (OCC); Joint Guidance on Overdraft Protection Programs, 70 Fed. Reg. 9127 (Feb. 24, 2005) (FDIC, OCC, Federal Reserve Board, and NCUA).

<sup>6</sup> Hayashi, Fumiko, The New Debit Card Regulations: Initial Effects on Networks and Banks, Federal Reserve Bank of Kansas City, Economic Review (2012).

<sup>7</sup> The Nilson Report #1008 (Dec. 2012).

<sup>8</sup> 2011 FDIC Survey of Banks' Efforts to Serve the Unbanked and Underbanked, p.16 (Dec. 2011), *available at* <http://www.fdic.gov/unbankedsurveys/2011survey/2011report.pdf>.

<sup>9</sup> Independent Community Bankers of America, ICBA Overdraft Payment Services Study: Community Bank Findings, p.24 (2012).

<sup>10</sup> FDIC Quarterly Banking Profile (Dec. 2012).

<sup>11</sup> National Credit Union Administration, PACA Facts Data 5300 Call Report Quarterly Summary December 2012 (Feb. 21, 2012).

---

<sup>12</sup> BB&T Corporation, 2012 Annual Report, p.22 and p.81 (2013); Commerce Bancshares, Inc., 2012 Annual Report and Form 10-K, Form 10-K p.22 (2013); Cullen/Frost Bankers, Inc., Year 2012 Annual Report, p.46 and p.82 (2013); Synovus, 2012 Annual Report, p.58 (2013).

<sup>13</sup> Moebs Services, Overdrafts Rebound Sharply in 2012 (Sept. 24, 2012).

<sup>14</sup> Federal Deposit Insurance Corporation, FDIC Study of Bank Overdraft Programs, p.57 (Nov. 2008), available at [http://www.fdic.gov/bank/analytical/overdraft/FDIC138\\_Report\\_Final\\_v508.pdf](http://www.fdic.gov/bank/analytical/overdraft/FDIC138_Report_Final_v508.pdf).

<sup>15</sup> Independent Community Bankers of America, ICBA Overdraft Payment Services Study: Community Bank Findings (June 2012).

<sup>16</sup> Strunk & Associates, L. P.

<sup>17</sup> FDIC Quarterly Banking Profile: Fourth Quarter 2012 Vol. 7, No. 1 (2013).

<sup>18</sup> National Credit Union Administration, PACA Facts Data 5300 Call Report Quarterly Summary December 2012 (Feb. 21, 2012).

<sup>19</sup> Federal Deposit Insurance Corporation, FDIC Study of Bank Overdraft Programs (Nov. 2008), available at [http://www.fdic.gov/bank/analytical/overdraft/FDIC138\\_Report\\_Final\\_v508.pdf](http://www.fdic.gov/bank/analytical/overdraft/FDIC138_Report_Final_v508.pdf).

<sup>20</sup> Bankrate.com, Checking Fees Rise to Record Highs in 2012 (Sept 24, 2012), available at <http://www.bankrate.com/finance/checking/checking-fees-record-highs-in-2012.aspx#slide=5>; Bankrate.com, Average Nonsufficient Funds Fee (Dec. 8, 2004), available at <http://www.bankrate.com/brm/news/checkingstudy2004/interest/nsf-fee.asp>.

<sup>21</sup> Moebs Services, 2012 The Year of Overdraft Coming Back (Mar. 25, 2013).

<sup>22</sup> Federal Deposit Insurance Corporation, FDIC Study of Bank Overdraft Programs (Nov. 2008), available at [http://www.fdic.gov/bank/analytical/overdraft/FDIC138\\_Report\\_Final\\_v508.pdf](http://www.fdic.gov/bank/analytical/overdraft/FDIC138_Report_Final_v508.pdf).

<sup>23</sup> *Id.*

<sup>24</sup> Federal Deposit Insurance Corporation, 2011 FDIC Survey of Banks' Efforts to Serve the Unbanked and Underbanked, p.28 (Dec. 2011).

---

<sup>25</sup> Joint Guidance on Overdraft Protection Programs, 70 Fed. Reg. 9127 (Feb. 24, 2005) (FDIC, OCC, Federal Reserve Board, and NCUA); Guidance on Overdraft Protection Programs, 70 Fed. Reg. 8428 (Feb. 18, 2005) (OTS).

<sup>26</sup> Truth in Savings, Regulation DD (Proposed rule), 69 Fed. Reg. 31760, 31761 (Jun. 7, 2004).

<sup>27</sup> Truth in Savings, Regulation DD (Final rule), 70 Fed. Reg. 29582 (May 24, 2005) and Truth in Savings, Regulation DD (Final rule), 74 Fed. Reg. 5584 (Jan. 29, 2009).

<sup>28</sup> Electronic Fund Transfers, Regulation E (Final rule), 74 Fed. Reg. 59033 (Nov. 17, 2009).

<sup>29</sup> Overdraft Payment Programs and Consumer Protection, Final Overdraft Payment Supervisory Guidance, FIL-81-2010 (Nov. 24, 2010) (FDIC), *available at* <http://www.fdic.gov/news/news/financial/2010/fil10081b.pdf>; Supplemental Guidance on Overdraft Protection Programs, Docket ID OTS-2010-0008 (Proposed guidance) (Apr. 29, 2010) (OTS); Guidance on Deposit-Related Consumer Credit Products, Docket ID OCC-2011-0012 (Proposed guidance), 76 Fed. Reg. 33409 (June 8, 2011) (OCC); Proposed Guidance on Deposit Advance Products; Withdrawal of Proposed Guidance on Deposit-Related Consumer Credit Products, 78 Fed. Reg. 25353 (Apr. 30, 2013) (OCC).

<sup>30</sup> Electronic Fund Transfers, Regulation E (Final rule), 74 Fed. Reg. 59041 (Nov. 17, 2009).

<sup>31</sup> *Id.*

<sup>32</sup> Independent Community Bankers of America, ICBA Overdraft Payment Services Study: Community Bank Findings, p.35 (2012).

<sup>33</sup> Consumer Bankers Association, CBA Releases Data Finding Overdraft Opt-In Rates at 16%, (Oct. 27, 2011) *available at* [http://www.cbanet.org/News%20and%20Media/press%20releases%202011/10272011\\_pressrelease.aspx](http://www.cbanet.org/News%20and%20Media/press%20releases%202011/10272011_pressrelease.aspx).

<sup>34</sup> Independent Community Bankers of America, ICBA Overdraft Payment Services Study: Community Bank Findings, p.35 (June 2012).

<sup>35</sup> 12 C.F.R. § 229.1.

<sup>36</sup> 12 C.F.R. § 229.13.

---

<sup>37</sup> Informa Research Services, Inc. (Nov. 2012), Calabasas, CA. [www.informars.com](http://www.informars.com). Although the information has been obtained from the various financial institutions, the accuracy cannot be guaranteed.

<sup>38</sup> *Id.*

<sup>39</sup> *Id.*

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> Mercator Advisory Group, Next-Generation Online Banking: Mobile, PFM, and Bill Pay (Mar. 2013).

<sup>43</sup> Federal Reserve Board of Governors, Consumers and Mobile Financial Services, p.7 (Mar. 2012).

<sup>44</sup> Richard Cordray, Director, CFPB, Remarks at the CFPB Roundtable on Overdraft Practices (Feb. 22, 2012), *available at* <http://www.consumerfinance.gov/speeches/prepared-remarks-by-richard-cordray-at-the-cfpb-roundtable-on-overdraft-practices>.