

Overdraft and Nonsufficient Fund Fees

Insights from the Making Ends Meet Survey and Consumer Credit Panel

CFPB Office of Research Publication No. 2023-9

Table of contents

Table of contents.....	1
1. Introduction.....	3
2. Data	8
3. Consumers' experiences with overdraft and NSF fees	11
3.1 Overdraft fees	11
3.2 NSF fees	14
3.3 Overlap in overdraft and NSF fees	16
3.4 Combining overdraft and NSF fees	19
4. Overdraft and NSF fees by socio-economic and demographic characteristics	22
5. Consumer credit and debt by experience with overdraft and NSF fees	26
5.1 Credit scores	26
5.2 Credit cards and credit availability	29
5.3 Home, auto, and student loans	33
5.4 Applying for and obtaining credit	35
5.5 Use of alternative credit	36
5.6 Delinquent debt	37
6. Financial strain and well-being by experience with overdraft and NSF fees	41
6.1 Account balances and saving behavior	41
6.2 Difficulty paying bills and managing an income shock	43

7. Conclusion	48
8. References	50
Appendix A: Supplemental tables and figures for three overdraft/NSF (combined) fee groups	53
Appendix B: Tables and figures for the four overdraft fee groups.....	58
Appendix C: Tables and figures for the three NSF fee groups	72
Appendix D: Charactistics of full Making Ends Meet sample	86

1. Introduction

When consumers using deposit accounts attempt withdrawal, debit, payment, or transfer transactions for amounts greater than the available funds in their account, financial institutions often charge them overdraft or non-sufficient funds (NSF) fees.¹ Overdrafts occur if the financial institution covers the transaction—thereby extending credit to the consumer—while NSF's occur when the financial institution does not cover the transaction.

While financial institutions have traditionally charged consumers a fee for overdrafts and NSF's,² a number of financial institutions have made changes to their overdraft and NSF programs and policies since 2021. These changes include the elimination or reduction of NSF and overdraft fees, limits on the number of fees consumers can be charged in a day, the introduction of grace periods for consumers to bring account balances positive before being charged a fee, and the introduction of *de minimis* thresholds below which consumers are not assessed fees.³ A recent Consumer Financial Protection Bureau (CFPB) analysis of banks and credit unions with over \$10 billion in assets, for example, found that nearly two-thirds of banks and one-quarter of credit unions have eliminated NSF fees.⁴ Additionally, an analysis of banks' overdraft fee policies at the 20 banks that reported the most overdraft/NSF revenue during 2021 indicates that 7 of the 20 have reduced or eliminated overdraft fees in 2021 or 2022.⁵

Against the backdrop of recent changes in financial institutions' overdraft programs and NSF practices, this report provides new insights about consumers' experiences with overdraft and NSF fees, including the demographic and economic characteristics of consumers with varying levels of overdraft and NSF activity. By pairing the CFPB's Making Ends Meet (MEM) survey with credit bureau data from our Consumer Credit Panel (CCP), we paint a broad picture of the

¹ Giordano Palloni, Caroline Ratcliffe, and Jade Elkins prepared this report.

² The size of overdraft and NSF fees vary across institutions. The CFPB's market monitoring conducted between December 2022 and August 2023 suggests that the median overdraft fee for the 119 banks and credit unions with more than \$10 billion in total assets that were charging overdraft fees was \$35. The analogous figure for the 53 banks and credit unions still charging NSF fees was \$32.

³ See the CFPB's May 2023 Data Spotlight for a discussion of overdraft/NSF revenue since 2019 (Consumer Financial Protection Bureau, May 2023).

⁴ See the CFPB's October 2023 Data Spotlight about financial institutions eliminating NSF fees (Consumer Financial Protection Bureau, October 2023).

⁵ For a discussion of changes in financial institution overdraft and NSF policies, see the CFPB's February 2022 blog "Comparing overdraft fees and policies across banks," available at <https://www.consumerfinance.gov/about-us/blog/comparing-overdraft-fees-and-policies-across-banks/>.

financial circumstances of consumers who incur overdraft and NSF fees.⁶ Our primary analyses use the 2023 MEM survey, which captures consumers' experiences with overdraft and NSF fees from roughly January 2022 through January 2023, although we use the 2019, 2021, and 2022 MEM surveys to discuss changes over time. Our primary analyses also use credit bureau data from February 2023, with the exception of respondents' credit scores, which are from December 2022 because credit scores are only available quarterly in the CCP data.

The MEM survey asks consumers about their experiences with overdraft and NSF fees in the past year, as well as their experiences applying for and obtaining credit, use of alternative financial services (e.g., payday and auto title loans), and financial pressures (e.g., difficulty paying bills). The survey also includes a wealth of demographic and economic characteristics such as household income, race and ethnicity, and educational attainment. The CCP, which is a deidentified sample of credit records maintained by one of the three nationwide consumer reporting agencies, allows us to observe the credit and debt profiles of these same consumers, including their credit scores, amount of credit available, and delinquent debt.

This report builds on earlier CFPB research that describes consumers' experiences with overdrafts and NSFs at large banks and delves into the experiences of frequent overdrafters using administrative transaction- and account-level data.⁷ We build on this research by using the MEM survey data paired with credit bureau data, which contain more detailed information on consumers and their experiences. We focus on answering the following research questions:

- How often do consumers incur overdraft and NSF fees?
- When consumers overdraft their account or are charged an NSF fee, how often is the overdraft transaction or the NSF fee expected, as opposed to being a surprise?
- How are consumers' overdraft and NSF-related experiences related to their socioeconomic and demographic characteristics, as well as their credit- and debt-related characteristics and financial well-being?

There is substantial overlap in the populations of consumers charged overdraft and NSF fees. Roughly three-quarters of consumers charged overdraft fees are also charged NSF fees, and vice versa. Because of this overlap and in order to group consumers into a manageable number of categories, we synthesize consumers' experiences with overdraft and NSF fees combined.

⁶ The sample for the Making Ends Meet survey was selected from the CFPB's Consumer Credit Panel, so the sample is representative of U.S. adults with a credit record, not all U.S. adults. See the Data section for details.

⁷ For research on consumer overdrafts more generally see CFPB (2014). For more specific research focused on frequent overdrafters, defined as consumers that incur more than 10 overdrafts or NSFs in a 12-month period, see CFPB (August 2017). We note that this earlier work generally groups consumers based on their combined overdraft and NSF transaction frequency, as opposed to just overdraft transaction frequency.

Specifically, our primary analyses categorize consumers into three groups based on the number of overdraft and NSF fees charged to household members in the past year:⁸

- No overdraft/NSF fees (no overdraft or NSF fees in the past year)
- Occasional overdraft/NSF fees (1 to 3 overdraft fees or 1 to 3 NSF fees in the past year)
- Frequent overdraft/NSF fees (both overdraft and NSF fees, or at least four or more of one fee type in the past year)

Beyond these three groups, our appendices provide detail about consumers grouped separately by the number of overdraft fees charged in the past year (0, 1-3, 4-10, and more than 10) and the number of NSF fees charged in the past year (0, 1-3, more than 3).

Key findings from our analyses include:

- Roughly a quarter (26.5 percent) of consumers reside in households that were charged an overdraft or NSF fee in the past year, with 8.0 percent having occasional experience with these fees (1-3 overdraft fees or 1-3 NSF fees), and 18.4 percent having frequent experience (both overdraft and NSF fees, or four or more of one fee type) with these fees.
 - Overdraft fees are somewhat more prevalent than NSF fees (23.6 percent versus 20.0 percent, respectively).
- There is substantial overlap in the populations charged overdraft and NSF fees.
 - Among consumers in households charged an *NSF fee* in the past year, the vast majority—85 percent—were also charged an overdraft fee.
 - Among consumers in households charged an *overdraft fee* in the past year, a somewhat smaller although still substantial share—72 percent—were also charged an NSF fee.
- Many consumers charged an overdraft or NSF fee in the past year were surprised by their most recent account overdraft or NSF fee.
 - Among consumers in households charged an overdraft fee in the past year, 43 percent were surprised by their most recent account overdraft, 35 percent thought it was possible, and just 22 percent expected it.
 - Focusing on consumers in households charged an NSF fee in the past year, 39 percent were surprised by their most recent NSF fee, 33 percent thought it was possible, and just 28 percent expected it.
 - Consumers in households with more overdrafts and NSF fees were less likely to report that they were surprised by their most recent overdraft or NSF fee.

⁸ The specific overdraft and NSF survey questions are presented in **Section 2** below.

- For example, among consumers in households charged 1 to 3 overdraft fees, 51 percent were surprised by their most recent overdraft; the share drops to 16 percent among consumers from households charged more than 10 overdraft fees.
- Consumers who are more likely to be economically disadvantaged—those with lower incomes, who have limited education, or who are non-white—are more likely to reside in households charged an overdraft and/or NSF fee in the past year. For example, while roughly 10 percent of consumers with an annual household income above \$175,000 were in households charged an overdraft or NSF fee in the past year, the share is more than three times higher (34 percent) for consumers with an annual household income below \$65,000.
- Consumers' overdraft experience generally aligns with their overall credit and debt profiles. Consumers in the frequent overdraft/NSF fee group have lower average credit scores, are the most likely to have a subprime credit score, no available credit on a credit card, and delinquent debt, while consumers in the no overdraft/NSF fee group have healthier financial profiles.
- The magnitude of the differences between the three overdraft/NSF fee groups are substantial. Examples include:
 - **Credit score:** One in ten consumers (10 percent) in the no overdraft/NSF fee group have a subprime credit score, with the share jumping to 25 percent for consumers in the occasional overdraft/NSF fee group and 41 percent for consumers in the frequent overdraft/NSF fee group. The average credit score differs by over 100 points for those in the no overdraft/NSF fee group (744) and those in the frequent overdraft/NSF fee group (637).
 - **Credit available on a credit card:** More than one in six consumers (18 percent) in the no overdraft/NSF fee group have no credit available on a credit card either because they do not have a credit card or they have exhausted their credit card limit. This share is higher for consumers in the occasional overdraft/NSF fee group (27 percent) and those in the frequent overdraft/NSF fee group (40 percent). The pattern is similar when focusing on the number of overdraft fees (only). Among consumers in households charged 0, 1-3, 4-10, and more than 10 overdraft fees in the past year, the shares with no credit available on a credit card are 19 percent, 32 percent, 38 percent, and 49 percent, respectively. While we do not observe the amount of available credit consumers have at the exact time an overdraft or NSF transaction occurs, our analysis suggests that the majority of consumers charged overdraft and NSF fees have some credit available on a credit card during the period that they report the fees

- occurring.⁹ This is relevant, as credit card debt is likely to be substantially cheaper than overdraft credit.¹⁰
- **Delinquent debt:** 13 percent of consumers in the no overdraft/NSF fee group have debt 60 or more days past due. This share nearly doubles—to 24 percent—for those in the occasional overdraft/NSF fee group, and then increases again to 42 percent for those in the frequent overdraft/NSF fee group.
 - Consumers who reside in households more frequently charged overdraft and/or NSF fees in the past year are more likely to struggle to meet financial obligations. The majority of consumers (81 percent) in the frequent overdraft/NSF fee group report difficulty paying a bill at least once in the past year. This share drops to 56 percent and to 25 percent among those in the occasional and no overdraft/NSF fee groups, respectively.

Below we discuss the MEM data and credit bureau data in more detail, including information about the specific MEM overdraft and NSF questions. We then describe the prevalence of overdraft and NSF fees as well as whether consumers expected their most recent incident. In the next three sections, we describe the socio-economic and demographic characteristics of consumers with different levels of overdraft and NSF fee activity, then present details of consumers' credit- and debt-related characteristics and measures of economic hardship and well-being by level of overdraft and NSF fee activity. Taken together, these analyses paint a detailed picture of the financial circumstances faced by consumers who reside in households charged overdraft and NSF fees.

⁹ The share of consumers with credit available on a credit card mentioned directly above is for February 2023. The shares are relatively stable over time (see **Section 5**).

¹⁰ With an overdraft of the median overdraft episode length (3 days), the median overdraft transaction amount (\$50), and the median overdraft fee (\$34) from the CFPB's 2014 report on checking account overdraft (CFPB 2014), the implied APR of overdraft credit is 8,273 percent. We caution that the implied overdraft APR is driven largely by the short median duration of overdraft episodes, which may affect the suitability of comparisons to longer-term credit sources.

2. Data

This report uses data from the MEM survey matched with credit bureau data. The MEM survey, developed by the CFPB’s Office of Research, is a survey of U.S. adults with a credit bureau record. The sample for the survey was selected from the CFPB’s Consumer Credit Panel, which is a 1-in-48 deidentified sample of credit records maintained by one of the three nationwide credit reporting agencies.¹¹ Because the sampling frame relies on traditional credit records, we do not have information on the roughly 1 in 10 U.S. adults who do not have a credit record.¹² Beyond questions about consumers’ experiences with overdraft and NSF fees, the MEM survey asks questions designed to understand households’ finances, including income, difficulty paying bills, use of alternative financial services, measures of financial well-being, and demographic characteristics. The pairing of the MEM survey data to credit bureau data allows us to build consumers’ credit and debt characteristics—such as credit score, credit availability, and delinquent debt—into a broad financial profile of consumers by their exposure to overdraft and NSF fees.

The findings presented in this report rely primarily on the 2023 MEM survey paired with credit bureau data, although we present trends in overdraft and NSF fees over time that use MEM data back to 2021.¹³ The 2023 survey was mailed to people in mid-January 2023,¹⁴ with most respondents completing the survey between January 19, 2023 and April 18, 2023.¹⁵ Our primary

¹¹ The Making Ends Meet survey is weighted to align with the Consumer Credit Panel, which is a comprehensive national sample of consumers with a credit record.

¹² See Brevoort, Grimm, and Kambara (2015). Consumers without a credit record are more likely to reside in lower-income neighborhoods and are younger (Brevoort, Grimm, and Kambara 2015, Consumer Financial Protection Bureau 2016)—two groups that are more likely to be in a household charged an overdraft or NSF fee. Thus, limiting the sample to consumers with a credit record may result in a lower estimated prevalence of overdraft and NSF fees.

¹³ For more information on earlier MEM data see Fulford and Rush (2020) and Fulford, Jain, et al. (2022).

¹⁴ The 2023 MEM survey includes two samples. Specifically, in January 2023, the CFPB mailed surveys to: (1) 2,136 consumers who completed the 2022 MEM survey (1,076 completed the 2023 survey; response rate of 50.5 percent) and (2) a new group of 14,000 consumers who were not previously mailed a MEM survey (2,136 completed the 2023 survey; response rate of 15.3 percent). Our analyses pool together responses from these two MEM samples. All analyses presented in this report use survey weights, where the survey weights adjust for non-response and this two-sample design. For more information about the 2023 MEM survey, including the survey instrument, see Fulford, Wilson, Kruse, Kalish, and Cotter (2023).

¹⁵ Approximately half of respondents returned their survey in January 2023 and just over one-third in February 2023. Accordingly, for figures that show credit outcomes over time, we depict the period during which overdraft and NSF fees would be reported as January 2022 to January 2023.

analyses use credit bureau data from February 2023, with the exception of respondents' credit scores, which are from December 2022 because credit scores are only available quarterly.¹⁶

The 2023 MEM survey asks separate questions about the number of overdraft and NSF fees respondents and others in their household were charged in the past year.¹⁷ In addition, respondents who report at least one overdraft fee [NSF fee], are asked about their level of surprise about having overdrafted their account [being charged an NSF fee].

The *overdraft questions* in the 2023 MEM survey are:¹⁸

- **In the past 12 months, how many overdraft fees have you or others in your household been charged?** *An overdraft fee occurs when your account balance is less than a payment, but your bank covers the transaction and charges you a fee.*
 - Answer options: None in the past 12 months; 1-3 fees; 4-10 fees; more than 10 fees
- [If at least one overdraft fee] **The last time this happened, were you surprised or did you expect to overdraft your account when you made the transaction?**
 - Answer options: Surprised; I thought it was possible; Expected to overdraft

The *NSF questions* in the 2023 MEM survey are:

- **In the past 12 months, how many insufficient funds fees have you or others in your household been charged?** *An insufficient funds fee occurs when your account balance is less than a payment, and your bank denies the payment and charges you a fee.*
 - Answer options: None in the past 12 months; 1-3 fees; more than 3 fees
- [If at least one NSF fee] **The last time this happened, were you surprised or did you expect to be charged a fee when you made the payment?**
 - Answer options: Surprised; I thought it was possible; Expected to be charged a fee

The MEM survey asks consumers about overdraft and NSF fee incidence in their households, rather than fees that they themselves were charged. As a result, the findings should be interpreted as measuring the prevalence of overdraft and NSF fees in households where

¹⁶ While our analyses use credit bureau data from February 2023, the exact timing of when creditors report balances and statuses to the credit bureau varies and can refer to prior month balances and statuses (e.g., February data may capture end of month balances for January).

¹⁷ Cognitive testing conducted for the MEM survey suggests that while some survey respondents might mistake overdraft fees and NSF fees, respondents to these questions generally understood the difference between the two fees. Additionally, the MEM-provided definitions (included in the questions) were specifically identified as being helpful for distinguishing between the fee types.

¹⁸ For the complete MEM survey instrument, see Appendix E of Fulford et al. (2023), available at <https://www.consumerfinance.gov/data-research/research-reports/making-ends-meet-in-2023-insights-from-the-making-ends-meet-survey/>.

*consumers with a credit record reside.*¹⁹ For ease of exposition, we sometimes refer to the number of overdraft and NSF fees that consumers were charged without specifying that the fees could have been assessed to another household member.

The MEM questions on overdraft and NSF fees differ importantly from existing data sources in two ways. First, as mentioned above, the MEM survey asks consumers about their households' experiences with overdraft fees and NSF fees *separately*, rather than asking about overdraft and NSF fees in a single question. While historically overdraft and NSF fee amounts were similarly sized, in recent years they have diverged somewhat with NSF fee amounts decreasing more rapidly and financial institutions being more likely to eliminate NSF fees entirely.²⁰ This divergence in fee amounts together with overdraft transactions resulting in the consumer's purchase (or payment) being processed implies that overdraft and NSF transactions may have distinct implications for consumers' well-being. The design of the MEM questions enables us to provide information about the characteristics and experiences separately for consumers in households charged overdraft fees and those in households charged NSF fees.

A second key advantage to the MEM questions is that consumers from households charged at least one overdraft fee in the past year were asked whether they expected to overdraft their account, thought it was possible, or were surprised that the last transaction resulted in an overdraft. Similarly, consumers from households charged at least one NSF fee in the past year were asked whether they expected to be charged a fee, thought it was possible, or were surprised the last time they were charged an NSF fee. These responses help inform our understanding of whether consumers have complete information about potential fees and account balances when making the transaction decisions that lead to overdraft and NSF fees.

¹⁹ That MEM respondents are asked to report about their households' (versus their own) experiences with overdraft and NSF fees will result in higher overdraft and NSF fee prevalence, since the number of overdraft and NSF fees the household was charged will be at least as high as the number the MEM respondent was charged.

²⁰ See Consumer Financial Protection Bureau (May 2023, October 2023) and CFPB blog "Comparing overdraft fees and policies across banks" (<https://www.consumerfinance.gov/about-us/blog/comparing-overdraft-fees-and-policies-across-banks/>). This is also consistent with findings from the CFPB's market monitoring activities between December 2022 and August 2023.

3. Consumers' experiences with overdraft and NSF fees

This section provides information on consumers' experiences with overdraft and NSF fees. We separately examine overdraft fees and NSF fees, before turning to analyses that show the overlap in these two fee groups. We find that more consumers were affected by overdraft fees than NSF fees in the year preceding the survey (roughly calendar year 2022), but the shares are somewhat similar. Specifically, nearly a quarter (23.6 percent) of consumers reside in a household that was charged at least one overdraft fee in the prior year, while 20.0 percent reside in a household that was charged at least one NSF fee in the prior year. Together, just over a quarter of consumers (26.5 percent) reside in a household charged either an overdraft fee or an NSF fee in the prior year, indicating a substantial overlap between the consumers charged overdraft fees and those charged NSF fees.²¹ These data also show that consumers continued to be affected by overdraft and NSF fees in 2022 despite industry changes.²²

3.1 Overdraft fees

Roughly three-quarters (76.4 percent) of consumers reside in a household not charged an overdraft fee in the past year, meaning nearly a quarter (23.6 percent) of consumers were in a household charged an overdraft fee in the past year (**Figure 1**).²³ Looking at the number of overdraft fees consumers were charged—1 to 3 fees, 4 to 10 fees, or more than 10 fees—we find

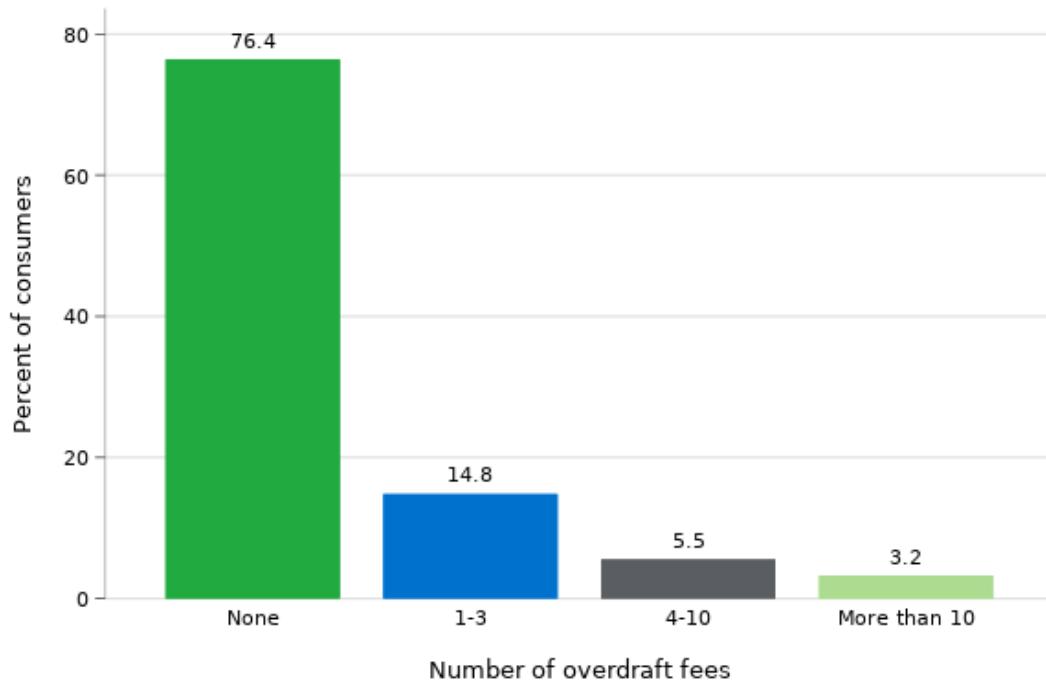
²¹ Our analyses of the share of consumers charged overdraft and/or NSF fees in the past year are based on all consumers regardless of whether they reported having a checking or savings account at the time of the survey. Consumers who report an overdraft or NSF fee in the past year but report not having a bank account at the time of the survey could have had an account and incurred an overdraft or NSF fee and then closed that account or had the account closed by the financial institution before the survey date. It is also possible that some consumers are reporting overdraft or NSF fees on other products (e.g., prepaid debit card, peer-to-peer payment services), or that people's answers to these questions include some measurement error (discussed further in Section 6). When we limit the sample to consumers who report that they or someone else in their household had a checking or savings account at the time of the survey, similar shares of consumers are identified as being in households charged overdraft and/or NSF fees in the past year: Specifically, the share of consumers in a banked household with an overdraft fee, an NSF fee, and an overdraft or NSF fee in the past year are 23.1 percent, 19.6 percent, and 26.1 percent, respectively.

²² As discussed above, unpublished CFPB market monitoring activity between December 2022 and August 2023 suggests that many financial institutions have recently made changes to their overdraft and NSF fee policies. These include reducing or eliminating overdraft and/or NSF fees, introducing grace periods during which consumers are allowed to make their account balance positive prior to being charged a fee, caps on the number of fees accounts can be charged, and *de minimis* amounts below which consumers are not charged overdraft or NSF fees. Many of these changes were announced during 2022, though not all were implemented during 2022.

²³ Our MEM estimate of the share of consumers charged an overdraft fee is lower than the share of *accounts* (30.2 percent) with at least one overdraft transaction in a 12-month period (CPFB 2014).

that the share of consumers in the groups declines as the number of overdraft fees increases.²⁴ Specifically, 14.8 percent of consumers were in households charged 1 to 3 overdraft fees, 5.5 percent were in households charged 4 to 10 overdraft fees, and 3.2 percent were in households charged more than 10 overdraft fees. Focusing in on the subset of consumers in households charged at least one overdraft fee in the past year, the share of consumers with 1 to 3, 4 to 10, and more than 10 overdraft fees are 63 percent, 23 percent, and 14 percent, respectively (not shown). This suggests that the majority of consumers charged an account overdraft fee were charged 1 to 3 fees. Also, while consumers charged more than 10 overdraft fees make up a small share of all consumers, past CFPB research finds that they are responsible for nearly 75 percent of all overdraft transactions.²⁵

FIGURE 1: PERCENT OF CONSUMERS CHARGED OVERDRAFT FEES IN THE PAST YEAR



The MEM survey does not ask about overdraft fee amounts paid, but we can approximate amounts. Using recent fee estimates based on CFPB market monitoring that reflect the

²⁴ As discussed in Section 2, the MEM survey only allows respondents to report the number of fees charged in a range—no fees, 1-3 fees, 4-10 fees, or more than 10 fees.

²⁵ See the CFPB's 2014 report on checking account overdraft and 2017 report on frequent overdrafters (Consumer Financial Protection Bureau 2014, August 2017).

reduction in per-overdraft fee amounts (discussed above),²⁶ overdraft fees can represent a substantial cost for households. At the estimated median overdraft fee of \$35, consumers from households with more than 10 overdraft fees would have been charged a minimum of \$385 over the year. Even using the lower average overdraft fee amount of \$26.61 from Bankrate’s 2023 Checking Account Survey,²⁷ consumers from households with more than 10 overdraft fees would have been charged a minimum of \$293. At the estimated median NSF fee of \$32 among financial institutions still charging these fees, consumers from households with more than three NSF fees would have been charged a minimum of \$128.²⁸

In addition to being asked about the number of overdraft fees charged, the MEM survey asked respondents charged at least one overdraft fee in the past year whether they were surprised by or expected to overdraft their account the last time it happened. The phrasing of the question (see Section 2) is such that respondents should focus on their most recent overdraft fee and indicate whether they were surprised or expected that they did not have sufficient funds in their account to cover the transaction.

Among consumers in households charged at least one overdraft fee in the past year, the share that expected their most recent overdraft increases with the number of overdraft fees. Among consumers in households charged 1 to 3 overdraft fees in the past year, 15 percent expected their most recent account overdraft (**Figure 2**). This increases modestly to 21 percent among consumers in households charged 4 to 10 overdraft fees, but then jumps sharply to over half—56 percent—for consumers in households charged more than 10 overdraft fees. Put another way, consumers with more than 10 overdraft fees were 3.5 times more likely to expect their most recent fee as compared with consumers charged 1 to 3 overdraft fees. The pattern is reversed when looking at the share surprised by their most recent overdraft: 51 percent of consumers in households charged 1 to 3 overdraft fees in the past year were surprised, compared with just 16 percent of consumers in households charged more than 10 overdraft fees. These patterns are consistent with previous research on frequent overdrafters that suggests some consumers use overdraft often and may use overdraft coverage intentionally as a form of credit.²⁹

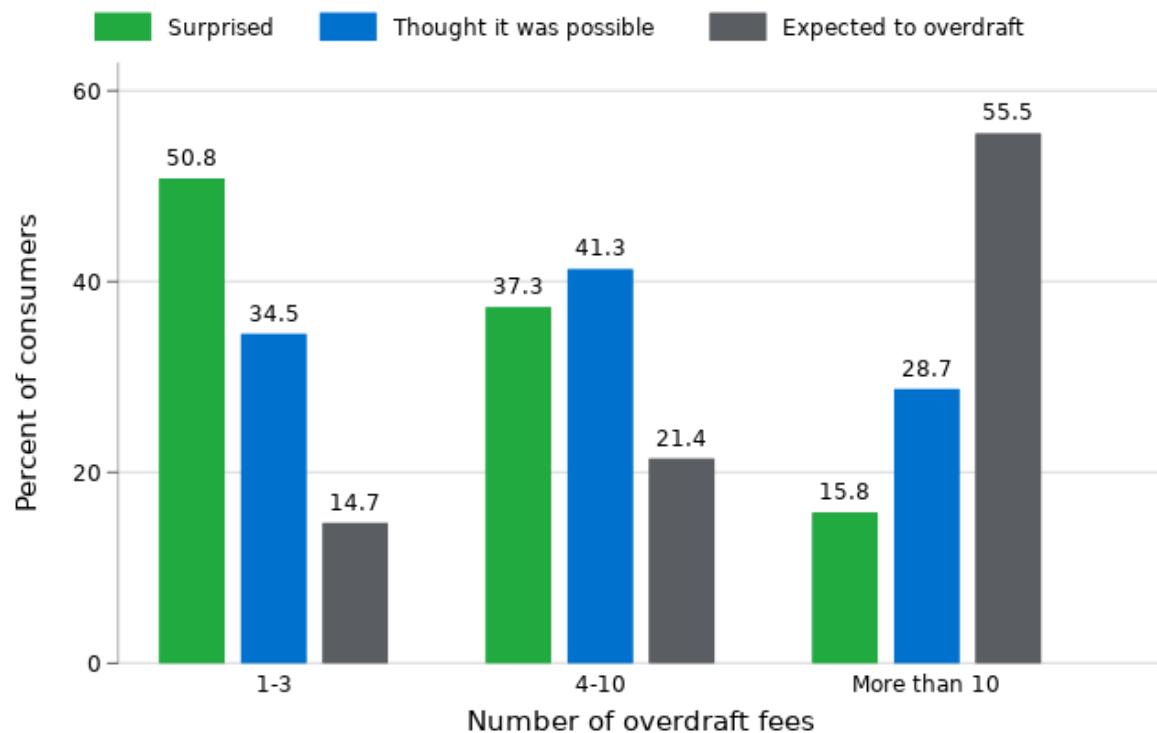
²⁶ These figures come from unpublished CFPB market monitoring activity between December 2022 and August 2023 and are based on financial institutions still charging overdraft fees.

²⁷ See <https://www.bankrate.com/banking/checking/checking-account-survey/>.

²⁸ Based on unpublished CFPB market monitoring activity between December 2022 and August 2023 for financial institutions still charging NSF fees.

²⁹ See, for example, the qualitative research discussed in “Consumer Voices on Overdraft Programs” (Consumer Financial Protection Bureau, November 2017).

FIGURE 2: CONSUMER EXPECTATIONS FOR MOST RECENT OVERDRAFT, BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR

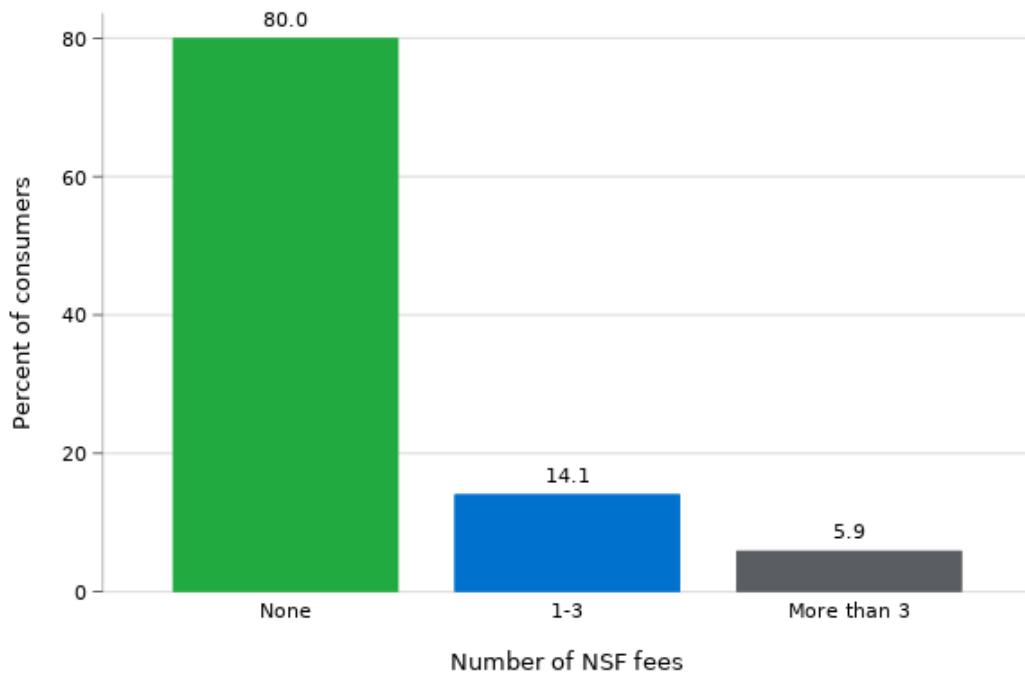


Note: Among all consumers in households charged an overdraft fee in the past year, the percent who were surprised, thought it was possible, and expected their most recent account overdraft is 43 percent, 35 percent, and 22 percent, respectively.

3.2 NSF fees

The share of consumers who reside in a household charged an NSF fee in the past year is lower, yet similar, to the share charged an overdraft fee. Four in five (80 percent) of consumers reside in a household charged no NSF fees in the past year (**Figure 3**), meaning 20 percent were charged at least one NSF fee. Looking at the number of NSF fees consumers were charged—1 to 3 fees or more than 3 fees—14.1 percent of consumers were in households charged 1 to 3 NSF fees, and 5.9 percent were in households charged more than 3 NSF fees. While the NSF fee categories are less disaggregated than the overdraft fee categories, our data suggest that NSF fees are charged less frequently than overdraft fees (e.g., 5.9 percent of consumers were charged more than three NSF fees, while 8.7 percent of consumers were charged more than three overdraft fees).

FIGURE 3: PERCENT OF CONSUMERS CHARGED NSF FEES IN THE PAST YEAR

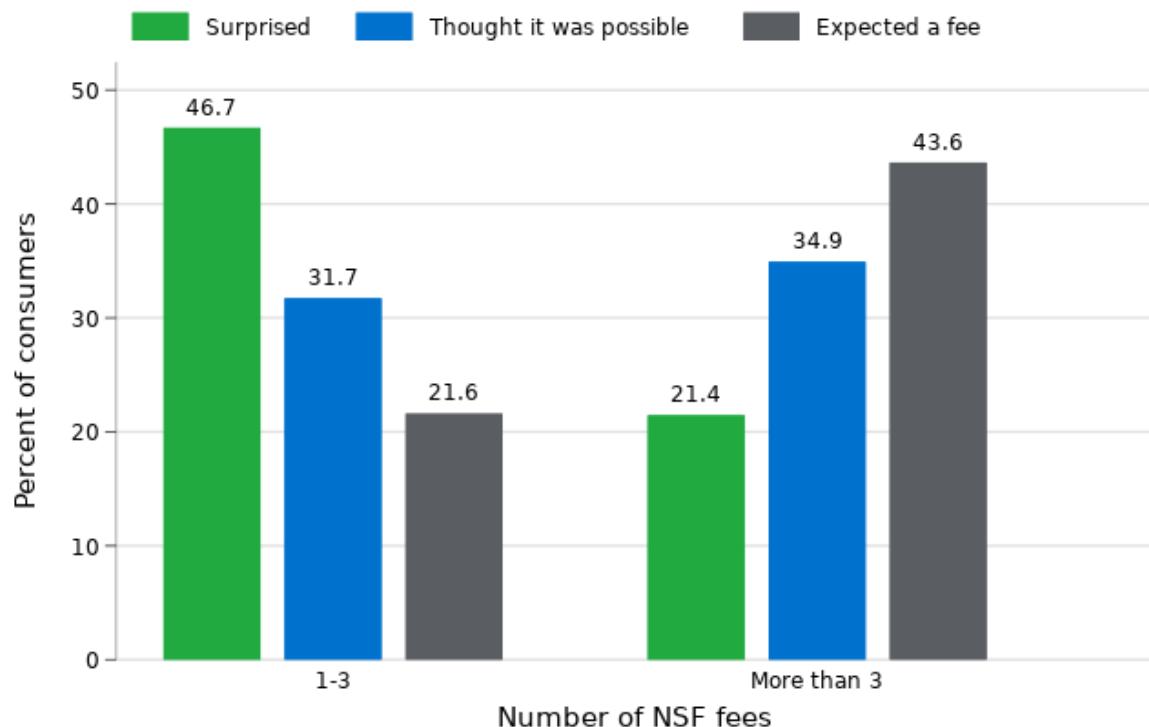


As with overdraft, the MEM survey asked respondents charged at least one NSF fee whether they were surprised the last time they were charged an NSF fee. The phrasing of this surprise question differs somewhat from the overdraft surprise question. In the case of NSF fees, the survey asks respondents whether they were surprised or expected to be *charged an NSF fee* (the last time they were charged a fee). This contrasts with the overdraft questions, where respondents are asked whether they were surprised they overdrafted their account (the last time they were charged an overdraft fee). For NSF fees, this implies that respondents could report not being surprised at having been charged an NSF fee despite having been surprised that they did not have sufficient funds in their account to cover the attempted transaction. However, consumers that expected a transaction to be covered by an overdraft program could still report being surprised that they were charged an NSF fee.

Among consumers in households charged at least one NSF fee in the past year, the share that expected their most recent NSF fee is higher among those with more NSF fees. Specifically, 22 percent of consumers in households charged 1 to 3 NSF fees in the past year expected their most recent NSF fee (**Figure 4**). This share doubles to 44 percent for consumers in households charged more than three NSF fees in the past year. As with overdraft, the pattern is reversed when looking at the share of consumers surprised by their most recent NSF fee: 47 percent of consumers in households charged 1 to 3 NSF fees were surprised by the most recent NSF fee, compared with 21 percent of consumers in households charged more than 3 NSF fees. Thus,

consumers who reside in households with more frequent NSF fee incidence (more than three) report less surprise at being assessed a fee the last time it happened. This could reflect learning on the part of consumers who were initially unaware of fees for declined transactions. Alternatively, consumers charged more NSF fees—who have lower average account balances³⁰—may be aware that a lower account balance increases the likelihood that a transaction of any size will exceed the account balance.

FIGURE 4: CONSUMER EXPECTATIONS FOR MOST RECENT NSF FEE, BY NUMBER OF NSF FEES IN THE PAST YEAR



Note: Among all consumers in households charged an NSF fee in the past year, the percent who were surprised, thought it was possible, and expected their most recent NSF fee is 39 percent, 33 percent, and 28 percent, respectively.

3.3 Overlap in overdraft and NSF fees

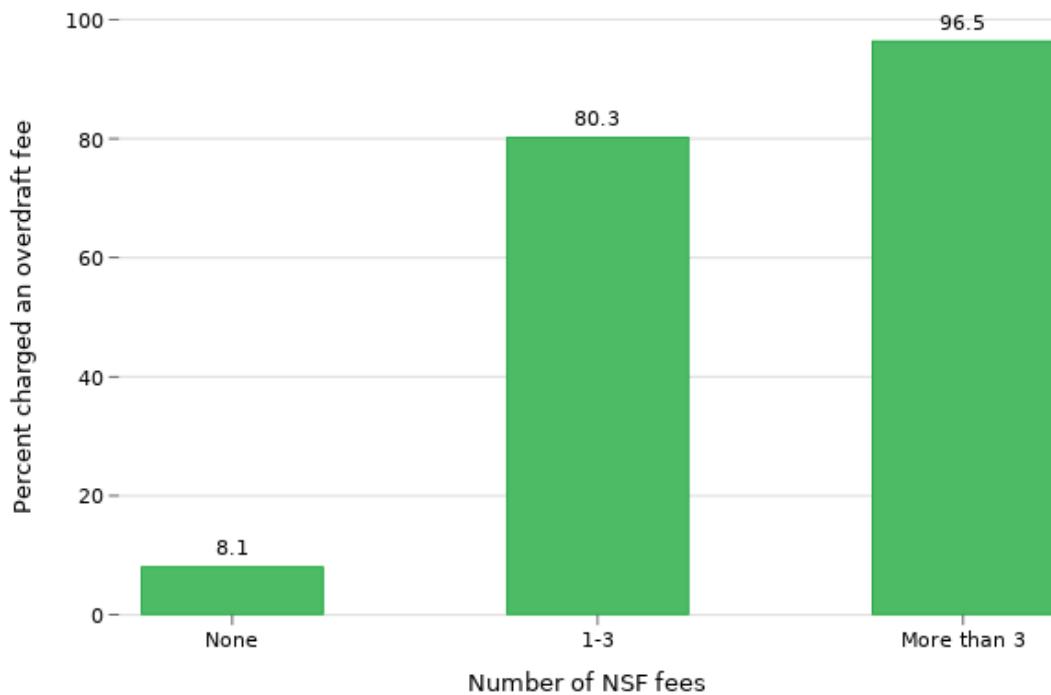
Examining overdraft and NSF fees together, we find that over a quarter (26.5 percent) of consumers resided in a household charged an overdraft or NSF fee in the past year. We also find

³⁰ See Consumer Financial Protection Bureau (August 2017).

substantial overlap in the populations charged overdraft and NSF fees. Among consumers charged an *NSF fee* in the past year, the vast majority—85 percent—were also charged an overdraft fee (not shown). Similarly, if we focus on consumers charged an *overdraft fee* in the past year, roughly three-quarters—72 percent—were also charged an NSF fee.³¹

To further assess the overlap in overdraft and NSF fees, we examine the incidence of overdraft fees [NSF fees] by the *level of NSF fee* [overdraft fee] incidence. Focusing first on overdraft fees, we examine the percent of consumers in households charged at least one overdraft fee in the past year by whether they were charged none, 1 to 3, or 3 or more NSF fees in the past year. Among consumers with no NSF fees in the past year, just 8.1 percent were charged an overdraft fee (**Figure 5**). Conversely, 80.3 percent of consumers charged 1 to 3 NSF fees and 96.5 percent of consumers charged more than 3 NSF fees were also charged an overdraft fee.

FIGURE 5: PERCENT OF CONSUMERS CHARGED AN OVERDRAFT FEE, BY NUMBER OF NSF FEES IN THE PAST YEAR

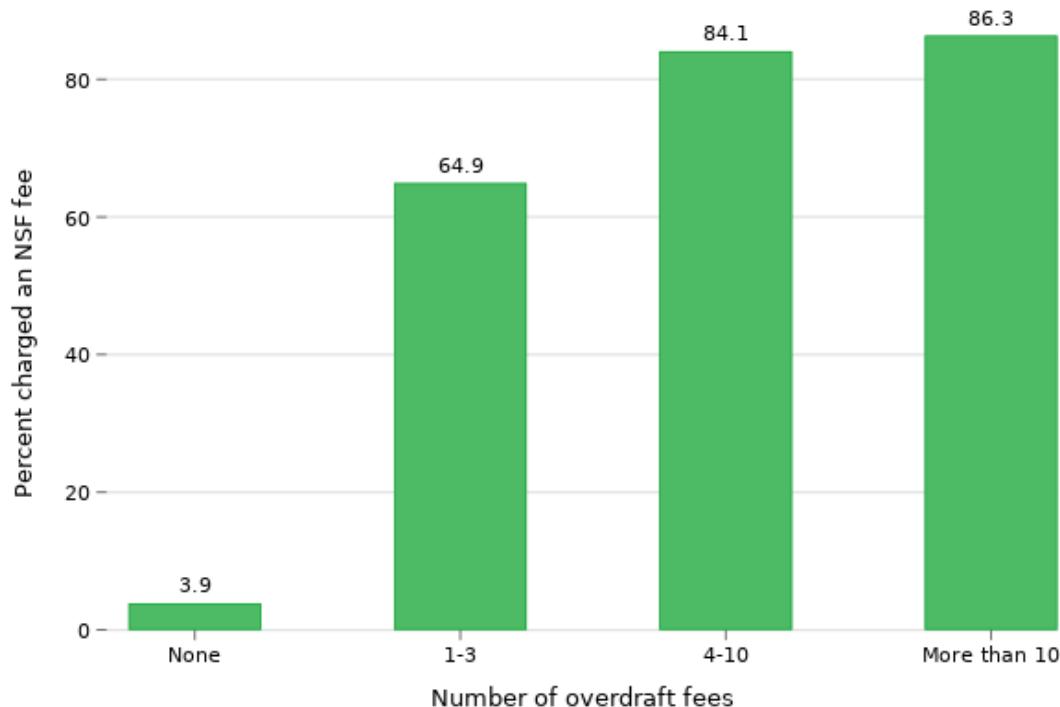


When we instead examine the share of consumers charged NSF fees by overdraft fee incidence, we find that among consumers in households that were not charged an overdraft fee in the past

³¹ Across all consumers in our sample, 17.1 percent were in a household charged both an overdraft fee and an NSF fee in the past year.

year, a small minority of consumers—3.9 percent—were charged an NSF fee (**Figure 6**). The percent of consumers charged an NSF fee jumps to 64.9 percent for consumers charged 1 to 3 overdraft fees in the past year, to 84.1 percent for consumers charged 4 to 10 overdraft fees, and to 86.3 percent for consumers charged more than 10 overdraft fees.

FIGURE 6: PERCENT OF CONSUMERS CHARGED AN NSF FEE, BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR



Both figures underscore the high degree of overlap between overdraft and NSF fees: few consumers are charged one fee without being charged the other type of fee. In part, this likely reflects both fees being assessed on the same type of transactions: those attempted for amounts greater than the consumer's available account balance. Whether the transaction is declined, and assessed an NSF fee, or covered, and assessed an overdraft fee, is typically at the discretion of the financial institution where the consumer holds their account rather than being a direct choice of the consumer.³² Furthermore, financial institutions may make their decision about

³² Under Regulation E requirements, financial institutions seeking to assess a fee or charge on a customer's account for paying an automated teller machine (ATM) or one-time debit card transaction pursuant to the institution's overdraft service must obtain the consumers affirmative consent, or opt-in. Consumers opting in to overdraft coverage could increase the likelihood that these transactions are allowed to go into overdraft and that they are charged an overdraft fee. Currently, these transactions do not typically result in NSF fees even if the transaction is declined.

whether to allow an attempted transaction to go into overdraft based on a credit limit that they assign to consumer accounts that is typically unknown to the consumer. As we would expect to see if these limits are important, it is less common to see consumers with an NSF fee and no overdraft fee than it is to see consumers with an overdraft fee and no NSF fee. Consumer transactions are allowed to go into overdraft (triggering overdraft fees) until a transaction would exceed their assigned limit, at which point transactions are declined and they may be charged an NSF fee; consumers who never exceed their limit would be charged overdraft fees but no NSF fees. As consumers are not typically charged an NSF fee for the first, small transaction they attempt with insufficient funds available in their account, there are few consumers with NSF fees but no overdraft fees. Additionally, as financial institutions rarely charge NSF fees on one-time ATM withdrawals or debit card transactions, overdraft fees can be assessed on a greater share of consumer payments, at least for consumers that have opted into such fees on these transactions.

3.4 Combining overdraft and NSF fees

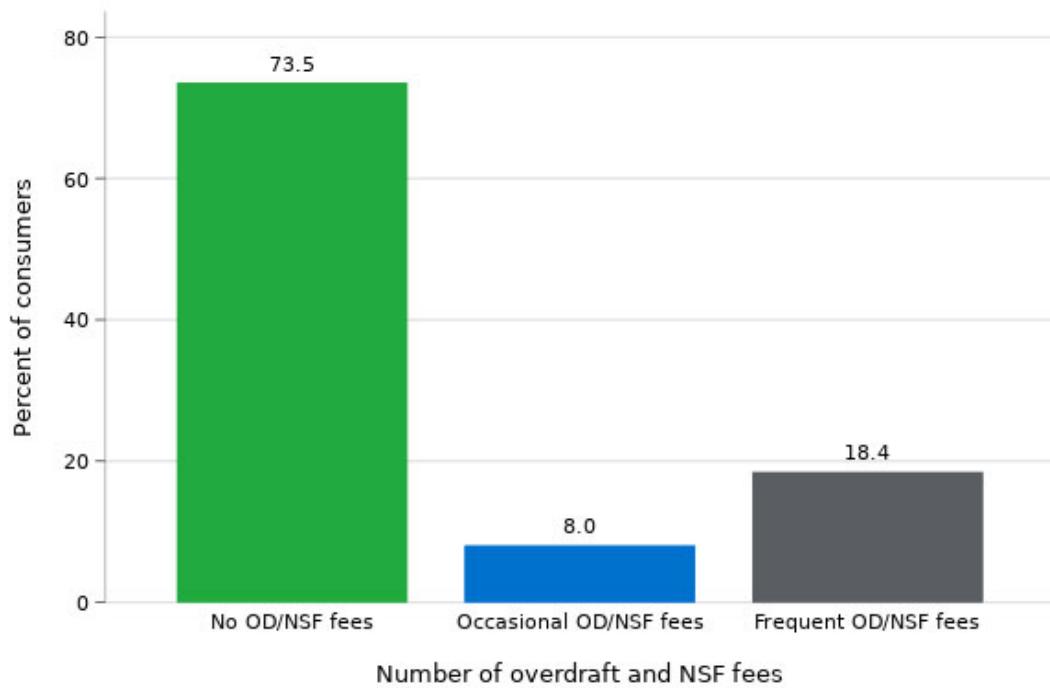
Recognizing the significant overlap in overdraft and NSF fees and to help facilitate our analysis below, our primary analyses focus on a combined measure of overdraft and NSF fee incidence. More specifically, we place consumers into one of three mutually exclusive groups:

- those in households charged no overdraft or NSF fees in the past year (no overdraft/NSF fee group),
- those in households charged either 1 to 3 overdraft fees *or* 1 to 3 NSF fees in the past year (occasional overdraft/NSF fee group), and
- those in households charged both overdraft and NSF fees, or charged at least four of one fee type in the past year (frequent overdraft/NSF fee group).

Figure 7 displays the percent of consumers in each of the three combined overdraft and NSF fee categories. Nearly three quarters—73.5 percent—of consumers are in the no overdraft/NSF fee group, meaning that 26.5 percent are in households charged an overdraft or NSF fee in the past year (roughly calendar year 2022). Across consumers, 8.0 percent are in the occasional overdraft/NSF fee group and 18.4 percent are in the frequent overdraft/NSF fee group.³³

³³ Of those in the occasional overdraft/NSF fee group, a majority experienced only overdraft fees rather than only NSF fees, consistent with the patterns discussed above for single fee-type consumers.

FIGURE 7: PERCENT OF CONSUMERS IN THE NO, OCCASIONAL, AND FREQUENT OVERDRAFT/NSF FEE GROUPS



Our finding that 26.5 percent of consumers reside in a household charged an overdraft or NSF fee is slightly higher than, yet consistent with, estimates of overdraft and NSF *transactions* (versus *fees*) from earlier MEM surveys (2019, 2021, and 2022).³⁴ Specifically, estimates from the 2019, 2021, and 2022 MEM surveys suggest that 25.1 percent, 20.0 percent, and 22.2 percent (respectively) of consumers resided in a household with an overdraft or NSF *transaction* in the past year.³⁵ Only the 2023 and 2021 estimated shares are statistically significantly different, although the lower share from the 2021 MEM survey (roughly calendar year 2020) is consistent with higher bank account balances that coincided with the expansion of

³⁴ Our estimate is lower than the 33 percent of *checking accounts* found to have at least one overdraft or NSF transaction in the 12-month period from July 2011 to June 2012 (Consumer Financial Protection Bureau, August 2017).

³⁵ The earlier MEM surveys (2019, 2021, and 2022) ask respondents about account overdraft and NSF *transactions*, not overdraft and NSF *fees*. Given the earlier focus on *transactions* (not fees) and that not all overdraft and NSF transactions are assessed a fee, the 2023 MEM data suggest a higher prevalence of overdraft and NSF transactions (higher than 26.5 percent). For information on the overdraft and NSF transactions in the earlier MEM surveys, see Fulford, Jain, Li, Saunders, and Wilson (2022).

federal benefits after the onset of the COVID-19 pandemic.³⁶ Our estimate from the 2023 MEM survey (roughly calendar year 2022) is, however, higher than the Financial Health Network estimate that 17 percent of consumers residing in a household with a checking account had someone in their household charged an overdraft or NSF fee in 2022. This share is virtually unchanged from their 2021 estimate.³⁷

As discussed above, an important difference between the 2023 MEM survey and these other surveys is that the other surveys ask respondents about their overdraft and NSF experiences in a single question,³⁸ while the 2023 MEM survey asks respondents about overdraft and NSF activity in separate questions. Research from developing countries finds that asking respondents about aggregated categories of expenditure can result in underreporting relative to asking about expenditure on a greater number of more narrowly defined categories.³⁹ Another difference between the 2023 MEM survey and the other surveys is that the 2023 MEM survey provides respondents with separate definitions of overdraft and NSF fees, which could help respondents understand the fees and serve as a reminder of fees charged.⁴⁰ Most notably, at least one bank refers to any transaction initiated by the consumer with insufficient funds available in their account as an NSF, while other financial institutions refer to both NSFs and overdrafts as overdrafts—regardless of whether the transaction is allowed to overdraft the account.⁴¹ Overall, estimates suggest that between 17 percent and 27 percent of consumers reside in households with overdraft or NSF transactions or charged overdraft or NSF fees in a one-year period.

³⁶ See Ratcliffe, Heck, Burke, Davies, Kennedy, and Wilson (2023) for analyses of bank account balances and the share of customers with negative account balances from 2019 to 2022, and JPMorgan Chase Institute's "Household Pulse," which provides account balances through March 2023 (<https://www.jpmorganchase.com/institute/research/household-income-spending/household-pulse-cash-balances-through-March-2023>).

³⁷ See Greene, Chege, Falgout, and Celik (2023).

³⁸ While the earlier MEM surveys had a single question about overdraft and NSF transactions, the response options allowed respondents to separately indicate that they were charged an overdraft fee or NSF fee. Specifically, the question was "In the past 12 months, have you or others in your household had an overdraft on a checking or savings account or had a payment turned down because the account balance was less than the charge?" with response options of "No," "Yes, had an overdraft," and "Yes, payment turned down."

³⁹ See Beegle, De Weerdt, Friedman, and Gibson (2012).

⁴⁰ As mentioned above, cognitive testing conducted for the MEM survey suggests that while some survey respondents might mistake overdraft fees and NSF fees, respondents generally understood the difference between the two fees, with the MEM-provided definitions specifically identified as being helpful for distinguishing between the fee types.

⁴¹ See for example <https://www.chase.com/content/dam/chase-ux/documents/personal/checking/deposit-account-agreement.pdf>.

4. Overdraft and NSF fees by socio-economic and demographic characteristics

This section examines overdraft and NSF fees by selected consumer socio-economic and demographic characteristics.⁴² We find differences in the number of overdraft and NSF fees by income, educational attainment, age, race and ethnicity, household structure, and where people live. Consumers who are more likely to be disadvantaged—those with lower incomes and those who have less education, are younger, and are non-white—are more likely to reside in a household charged an overdraft or NSF fee in the past year.⁴³ We find similar patterns when we separately examine overdraft fee activity (0, 1-3, 4-10, more than 10; see **Appendix B**) and NSF fee activity (0, 1-3, more than 3; see **Appendix C**). We also present characteristics for the full MEM sample in **Appendix D**.

Looking first at household income, we find more overdraft and NSF activity among lower income households. This is not surprising as lower income households are generally more financially constrained and likely find it harder to make ends meet. Roughly a third (33 to 35 percent) of consumers with an annual household income of \$65,000 or less reside in a household charged an overdraft or NSF fee in the past year (**Table 1**). The percent is substantially lower at 10 percent among those with an annual household income above \$175,000. The gap between these income groups is primarily driven by the share of consumers in the frequent overdraft/NSF fee group (i.e., the percent having both overdraft and NSF fees, or having at least four of one fee type), which is about 25 percent of consumers with incomes of \$65,000 or less and 5 percent of those with incomes above \$175,000. Beyond highlighting a gap by household income level, these numbers show that even relatively high-income consumers are not immune from overdraft and NSF fees. Among consumers with household incomes of

⁴² We also present socio-economic and demographic characteristics (column percents versus row percents) for the three overdraft/NSF fee groups (see **Appendix A, Table 8**).

⁴³ The patterns we see here are also consistent with literature that has shown that consumers who are more financially vulnerable are more likely to be in households charged overdraft fees (Falgout, Greene, and Celik 2023) and that account holders with frequent overdrafts are more likely to have low end-of-day balances, low credit scores, less credit card access, and be younger (Consumer Financial Protection Bureau, August 2017).

\$65,001 to \$100,000 and \$100,001 to \$175,000, 26 percent and 18 percent reside in households charged an overdraft or NSF fee, respectively.⁴⁴

TABLE 1: OVERDRAFT AND NSF FEE GROUP BY SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS

Overdraft (OD) and NSF Fees (past year)	OD/NSF Fees No	OD/NSF Fees Yes	Occasional OD/NSF Fees	Frequent OD/NSF Fees
Household Income (%)				
\$35,000 or less	66.6	33.4	8.0	25.4
\$35,001-\$65,000	65.0	35.0	10.4	24.6
\$65,001 - \$100,000	73.7	26.3	8.7	17.6
\$100,001-\$175,000	81.9	18.1	7.0	11.1
\$175,001 or more	90.2	9.8	4.7	5.1
Highest Level Education (%)				
High school or less	66.7	33.3	9.5	23.8
Some college but no degree	67.5	32.5	7.6	24.9
Two-year degree or vocational	71.7	28.3	5.8	22.5
College degree or postgraduate	81.5	18.5	8.1	10.3
Age (%)				
Younger than 35	64.9	35.1	12.5	22.6
35 to 54	68.8	31.2	8.1	23.1
55 to 61	74.6	25.4	7.8	17.6
62 and older	85.3	14.7	4.7	10.0
Race and Ethnicity (%)				
White, non-Hispanic	77.9	22.1	7.7	14.4
Black	62.6	37.4	10.9	26.5
Hispanic (not Black)	64.6	35.4	8.1	27.2
Other	78.7	21.3	5.9	15.4
Gender (%)				
Male	78.8	21.2	7.4	13.8
Female	69.3	30.7	8.7	22.1
Married or living with Partner (%)				
No	69.0	31.0	8.3	22.7
Yes	76.4	23.6	7.9	15.8
Household has Children (%)				

⁴⁴ To explore how the likelihood of residing in a household that was charged an overdraft or NSF fee varies with household income, we also run ordinary least squares (OLS) regressions of whether a consumer was charged an overdraft or NSF fee on household income categories. Even after flexibly controlling for differences in credit scores, consumers from households with incomes below \$35,000 are 15 percent more likely to be charged an overdraft fee and 73 percent more likely to be charged an NSF fee than consumers from households with incomes above \$175,000 (see **Appendix A, Figures 18 and 19**).

Overdraft (OD) and NSF Fees (past year)	OD/NSF Fees No	OD/NSF Fees Yes	Occasional OD/NSF Fees	Frequent OD/NSF Fees
No Children	78.4	21.6	7.8	13.9
Has Children	65.7	34.3	8.4	25.9
Military Service (%)				
No military service	72.7	27.3	8.3	19.0
Some military service	83.4	16.6	5.2	11.4
Geographic Group (%)				
Urban	73.8	26.2	8.0	18.2
Some urban	72.1	27.9	9.0	19.0
Rural	70.5	29.5	8.0	21.6

Note: Consumers' ages are from the CCP data; other consumer- and household-level information in this table is from the MEM data.

The trend by educational attainment is not as pronounced as it is for income. Among consumers in each of the three lower educational groups (high school degree or less, some college but no degree, or two-year college or vocational degree), between 28 percent and 33 percent were in households charged an overdraft or NSF fee in the past year. This falls to 19 percent for consumers with a four-year college degree or more. Additionally, consumers with a four-year college or postgraduate degree are about half as likely as all other education groups to be in the frequent overdraft/NSF fee group. These numbers suggest that overdraft and NSF fees fall disproportionately on less educated consumers, but are nonetheless experienced by consumers across a wide range of educational attainment levels.

As consumers age they are less likely to reside in households charged an overdraft or NSF fee in the past year. While 35 percent of consumers ages 18 to 34 reside in households charged an overdraft or NSF fee, the share is 15 percent among those ages 62 and older. This decline by age persists even after flexibly controlling for consumer credit scores (see **Appendix A, Figures 20 and 21**).⁴⁵ We also see gaps within each of the two overdraft/NSF fee groups—i.e., those in the occasional overdraft/NSF fee group and in the frequent overdraft/NSF fee group. The share of consumers in the frequent overdraft/NSF fee group is 23 percent among consumers ages 18 to 34 and ages 35 to 54, and 10 percent among consumers ages 62 and older.

⁴⁵ More precisely, we run OLS regressions of whether a consumer was charged an overdraft or was charged an NSF fee on five mutually exclusive age categories (26-35, 36-45, 46-55, 56-65, older than 65), with age 18-25 serving as the omitted category. We also run versions of these regressions that include indicators for each consumer's credit score category (deep subprime, subprime, near prime, prime, or super-prime) and interact these indicators with a linear control for credit score.

Consistent with work documenting racial wealth and income disparities,⁴⁶ we find racial and ethnic disparities in overdraft and NSF fee activity. As compared with white, non-Hispanic consumers, Black consumers are 69 percent more likely (22 percent versus 37 percent, respectively) and Hispanic consumers are 60 percent more likely (22 percent versus 35 percent, respectively) to reside in a household charged at least one overdraft or NSF fee in the past year. Additionally, relative to white, non-Hispanic consumers, Black consumers are 84 percent more likely and Hispanic consumers are 89 percent more likely to reside in a household in the frequent overdraft/NSF group.

We find higher rates of overdraft/NSF fee activity among females than males (31 percent versus 21 percent, respectively). Household composition—both living with a spouse or partner and having children in the household—is also related to overdraft and NSF activity. Consumers who are not married or not living with a partner (versus are married or living with a partner) and those with children (versus without children) in the household are more likely to be in a household charged overdraft or NSF fees. Nearly a quarter (24 percent) of consumers who are married or living with a partner reside in a household charged an overdraft or NSF fee in the past year, while the share is nearly a third (31 percent) for consumers who are neither married nor living with a partner.

We also find differences for people with and without military service. Specifically, we find that fewer people with versus without military service reside in a household charged an overdraft or NSF fee in the past year (17 percent versus 27 percent, respectively).

Beyond consumers' own characteristics, we look at overdraft and NSF fee activity by where consumers live. Specifically, we compare consumers who live in urban, some urban, and rural areas.⁴⁷ We find a slightly higher share of consumers live in households charged an overdraft or NSF fee as we move from those living in urban areas (26 percent) to some-urban areas (28 percent) to rural areas (30 percent), although these percentages are not statistically significantly different from one another.

⁴⁶ On average, the wealth of white families is about six times greater than the wealth of Black and Hispanic families (Aladangady, Chang, and Krimmel 2023). Also, in 2020, the median income of white households was 60 percent [35 percent] higher than the median income of Black [Hispanic] households (see <https://home.treasury.gov/news/featured-stories/racial-inequality-in-the-united-states>).

⁴⁷ Geographic designations—urban, some urban, and rural—are for the respondent's county of residence and are based on the Department of Agriculture's 2013 Rural-Urban Continuum Codes (RUCC). Urban counties contain a metro area (defined as RUCC 1, 2 and 3), some-urban counties contain a smaller urban area or are adjacent to a metro area (RUCC 4, 5, and 6), and rural counties lack a substantial urban area and are not adjacent to a metro area (RUCC 7, 8, and 9). For information about the RUCC, see: USDA Economic Research Service, "Rural Urban Continuum Codes," accessed September 22, 2023, <https://www.ers.usda.gov/data-products/rural-urban-continuum-codes>.

5. Consumer credit and debt by experience with overdraft and NSF fees

The pairing of the Making Ends Meet survey data with credit bureau data allows us to paint a picture of consumers' credit and debt circumstances by their level of overdraft and NSF activity. Here we present information about consumers' credit access, credit availability, and debt by how often they were charged overdraft and NSF fees in the past year. As discussed above, the credit bureau data are primarily from February 2023. One exception is consumers' credit scores, which are from December 2022, as they are only available quarterly.

Consumers' overdraft and NSF fee experiences generally align with their credit and debt profiles. Consumers in the frequent overdraft/NSF fee group have lower average credit scores, are the most likely to have a subprime credit score, no available credit on a credit card, and delinquent debt, while consumers in the no overdraft/NSF fee group have healthier credit and debt profiles. We find similar patterns when we separately examine consumers by the number of overdraft fees (see **Appendix B**) and the number of NSF fees (see **Appendix C**) they were charged in the past year.

Below we examine consumers' credit scores, credit card characteristics and credit availability, experience applying for and obtaining credit, types of debt, delinquent debt, and finally, use of payday, auto title, and pawnshop loans.

5.1 Credit scores

Broadly speaking, a consumer's credit score is a measure of their credit health. Having a subprime credit score, for example, indicates that the consumer has struggled to repay debts on time. Lower credit scores hinder consumers' access to traditional credit, which can push them towards high-cost alternatives. Among these alternatives is overdrafting a checking account. Overdraft fees typically do not vary with the size of the overdraft and past research shows that overdraft fees are often assessed on small transactions, with consumers bringing their accounts back to positive quickly.⁴⁸ Thus, overdraft credit can be quite costly relative to the amount of

⁴⁸ See Consumer Financial Protection Bureau (2014).

credit extended and given its typically short duration.⁴⁹ Consumers with subprime credit scores (score below 620) often have difficulty accessing traditional credit, while consumers with near-prime credit scores (score of 620 to 659) generally have access to traditional credit but often face higher prices than those with higher scores. Consumers with prime (660 to 719) and super-prime (720 and above) scores are best positioned to access credit at a low price.

We find that credit scores decrease as the number of overdraft and NSF fees increase. For example, the average credit score is over 100 points higher for those in the no overdraft/NSF fee group (744, in the super-prime range) relative to those in the frequent overdraft/NSF fee group (637, in the near-prime range) (**Table 2**). Among consumers in the occasional overdraft/NSF fee group, the average credit score falls roughly in the middle of the other two groups (687, in the prime range).

TABLE 2: CREDIT SCORE PROFILES BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR

Overdraft (OD) and NSF Fees (past year)	No OD/NSF Fees	Occasional OD/NSF Fees	Frequent OD/NSF Fees
Credit Score			
Mean	744	687***	637**/++
Median	769	701***	631**/++
Credit Score Category (%)			
No Credit Score	7.8	9.7	9.5
Subprime	9.7	24.6	41.0
Near Prime	5.1	9.7	12.3
Prime	13.4	18.3	18.0
Super Prime	64.0	37.6	19.2

Notes: Credit scores are from the CCP data and measured as of December 2022. The “**” and “+” signs in the top “credit score category” row indicate the level of statistical significance between the OD/NSF fee groups for the credit score category variable. They show that all differences between the three overdraft/NSF groups are significant at the 0.01 level.

*/**/*** differs significantly from “no OD/NSF fees” group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from “occasional OD/NSF fees” group at the 0.10/0.05/0.01 level.

The share of consumers with no credit score is in the 8 percent to 10 percent range for each of the three overdraft/NSF fee groups, while the share with a subprime credit score is substantially higher among consumers with more overdraft and NSF activity (**Table 2**).⁵⁰ Among consumers

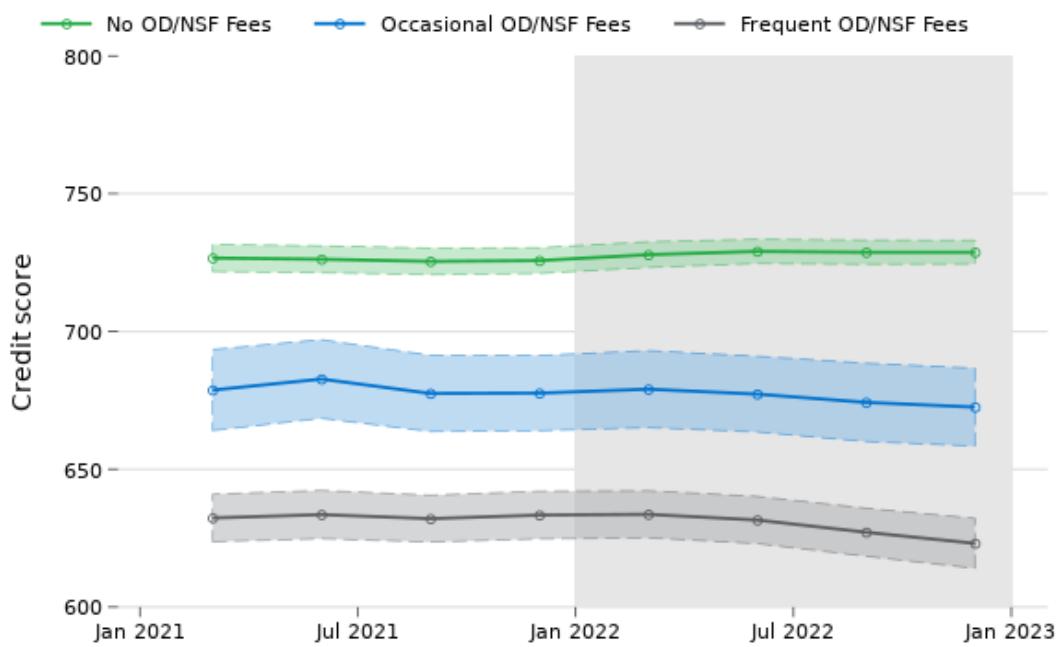
⁴⁹ While overdraft programs represent a type of credit available to consumers, neither overdraft (nor NSF) transactions or fees are reported to traditional credit bureaus, and therefore past transactions and fees are not reflected in consumers’ credit scores.

⁵⁰ All analyses use a commercially available credit score. Recall that our analysis is limited to consumers with a credit bureau record. Consumers with a credit bureau record but no credit score could have a credit record generated because they had an unpaid bill sent to collections (e.g., unpaid utility or medical bill) or an inquiry for credit (e.g., applied for and turned down for a credit card). The consumer could also have traditional credit, but they do not have enough information on their credit report to generate a score (e.g., young adult is an authorized user on their parents’ credit card only).

in the frequent overdraft/NSF fee group, 41 percent have a subprime credit score, while this share is 25 percent among consumers in the occasional overdraft/NSF fee group and 10 percent among consumers in the no overdraft/NSF fee group. These numbers suggest that some consumers in each of the three groups may have trouble obtaining well-priced traditional credit, but that this is substantially more likely among consumers with more overdraft and NSF activity. With restricted access to traditional credit, some consumers may be intentionally using overdrafts as a form of credit. These consumers might not be seeking out additional credit, however. A subprime credit score signals difficulty repaying debts, so these low credit score consumers may jointly have trouble repaying debts and maintaining a positive checking account balance.

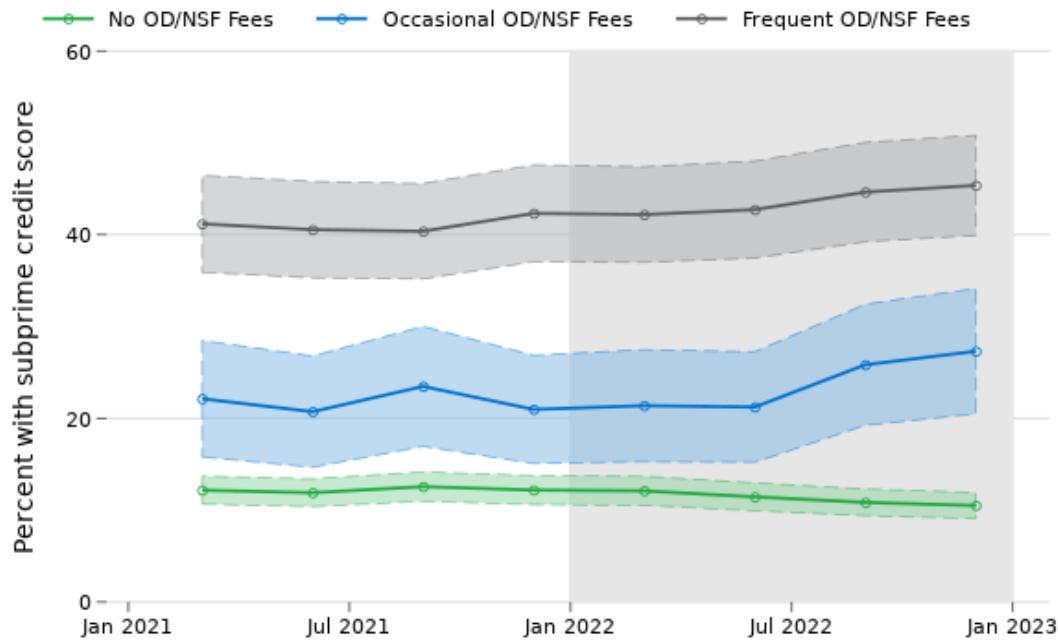
The gap between credit scores across the three overdraft/NSF fee groups is not limited to the survey month. Indeed, we see a pattern of separation between the three overdraft/NSF fee groups when we look over a roughly two-year period from early 2021 to December 2022 (**Figures 8 and 9**).

FIGURE 8: AVERAGE CREDIT SCORE OVER TIME BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR



Notes: Credit scores are from the CCP data. The grey shaded area shows the reporting period for consumers overdraft and NSF activity.

FIGURE 9: PERCENT OF CONSUMERS WITH A SUBPRIME CREDIT SCORE OVER TIME BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR



Notes: Credit scores are from the CCP data. The grey shaded area shows the reporting period for consumers' overdraft and NSF activity.

5.2 Credit cards and credit availability

Here we examine whether consumers have a credit card(s), the amount of credit they have available on the card(s), how much of their existing credit they have used (i.e., credit card utilization), and whether they have an unpaid balance after making their last payment (i.e., credit card revolving).⁵¹ We examine credit cards because they are a particularly liquid form of credit and can be used at a wide range of businesses. However, they have certain limitations. For example, credit cards typically cannot be used to pay rent or loan obligations (e.g., mortgage, auto loan). While credit cards generally offer cash advances, which consumers can then use to pay for obligations they cannot charge directly to a credit card, these cash advances generally come with additional fees, no grace period for interest charges, and lower credit limits.

⁵¹ We only include general-purpose credit cards in our analyses (i.e., we exclude retail cards). While retail cards could free resources for other necessities, they are generally only accepted at the branded store and do not offer cash advances, and so provide consumers with less liquidity.

Credit card ownership and the amount of credit available on credit cards, which are measured as of February 2023, decline as the number of overdraft and NSF fees increase (**Table 3**). Looking first at the percent of consumers with no credit available on a credit card—either because they do not have a credit card or they have exhausted their credit card limit—we find that 18 percent of consumers in the no overdraft/NSF fee group have no credit available on a credit card. This jumps by about 9 percentage points to 27 percent for consumers in the middle group and then by nearly 13 percentage points to 40 percent for consumers in the frequent overdraft/NSF fee group. However, even among consumers in the frequent overdraft/NSF fee group, the majority—60 percent—have some credit available on a credit card in February 2023.

TABLE 3: CREDIT CARD OWNERSHIP AND CREDIT AVAILABILITY BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR

Overdraft (OD) and NSF Fees (past year)	No OD/NSF Fees	Occasional OD/NSF Fees	Frequent OD/NSF Fees
All Consumers			
Have a credit card (%)	84.5	78.4	72.8***
No credit available (%)	18.1	27.3**	40.0***/+++
Credit card holders			
No credit available (%)	3.1	7.2	17.7***/+++
Credit available (\$)			
Median	22,991	7,200***	1,288***/+++
Mean	33,824	16,110***	11,959***/+
Credit card limit (\$)			
Median	29,500	16,700***	6,500***/+++
Mean	40,489	22,977***	18,153***/+
Credit card balance (\$)			
Median	2,684	3,353	3,007
Mean	6,680	7,032	6,250
Credit card utilization (%)			
Median	10.2	34.2***	65.8***/+++
Mean	23.9	44.2***	60.6***/+++

Notes: The credit card information presented in this table is from the CCP data for February 2023.

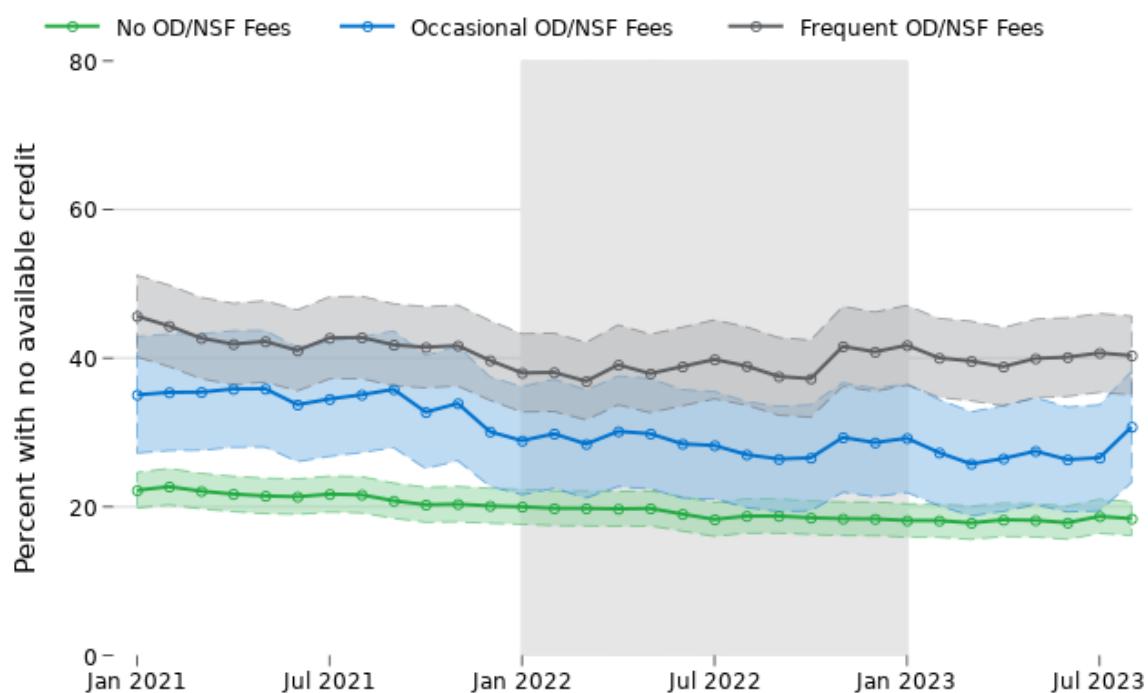
*/**/*** differs significantly from “no OD/NSF fees” group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from “occasional OD/NSF fees” group at the 0.10/0.05/0.01 level.

While we do not observe the amount of available credit consumers have at the exact time an overdraft or NSF transaction occurs, our over time analysis shows a relatively stable pattern, with the majority of consumers in the frequent and occasional overdraft/NSF fee groups having some credit available on a credit card during the period that they report the fees occurring

(Figure 10).⁵² This is relevant, as credit card debt is generally much cheaper than overdraft credit.⁵³ However, as discussed above, credit cards come with limitations and are not a perfect substitute for cash; this could drive even consumers with available credit card credit to more costly overdraft credit.

FIGURE 10: PERCENT OF CONSUMERS WITH NO CREDIT AVAILABLE ON A CREDIT CARD OVER TIME BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR



Notes: Credit card information is from the CCP data. The grey shaded area shows the reporting period for consumers' overdraft and NSF activity.

The amount of credit available to consumers with a credit card is not insubstantial. Among credit card holders in the frequent overdraft/NSF fee group, the median amount of credit

⁵² Even with monthly credit bureau data on credit available on a credit card, it remains possible that consumers could be more likely to be charged overdraft or NSF fees in months or at times within months when they have no or low levels of credit availability. Definitively determining the amount of credit available on a credit card at the time of an overdraft or NSF transaction would require detailed transaction data (e.g., week, day, or hour).

⁵³ With an overdraft of the median overdraft episode length (3 days), the median overdraft transaction amount (\$50), and the median overdraft fee (\$34) from the CFPB's 2014 report on checking account overdraft (Consumer Financial Protection Bureau 2014), the implied APR of overdraft credit is 8,273 percent. As noted above, this implied overdraft APR is driven largely by the short median duration of overdraft episodes, which may affect the suitability of comparisons to longer-term credit sources.

available on a credit card was \$1,288 in February 2023. This amount, however, is lower than the cost of a typical financial shock. For the roughly 60 percent of households that experience a financial shock each year, the median cost is about \$2,000.⁵⁴ Compared with credit card holders in the frequent overdraft/NSF fee group, the median amount of credit available on a credit card is more than five times higher among consumers in the occasional overdraft/NSF fee group (\$7,200) and nearly 18 times higher among consumers in the no overdraft/NSF fee group (\$22,991).

Table 3 also shows information about consumers' credit card limits, credit card balances, and credit card utilization for credit card holders in each of the three groups.⁵⁵ While credit card balances are similar across the three overdraft/NSF fee groups, credit card limits are lower and credit card utilization rates are higher among those with an overdraft or NSF fee. Among consumers in the frequent overdraft/NSF fee group, the median credit card utilization rate is 66 percent, which is high relative to levels recommended for credit scoring purposes.⁵⁶ The median credit card utilization rate is roughly half as large (34 percent) among consumers in the occasional overdraft/NSF fee group and only 10 percent among consumers in the no overdraft/NSF fee group.⁵⁷

Consistent with these credit card utilization findings, the share of credit card holders who report having an unpaid balance on their credit card after making their last payment (i.e., credit card revolving) is substantially higher among consumers charged versus not charged an overdraft or NSF fee in the past year.⁵⁸ Roughly three-quarters of credit card holders in the occasional and frequent overdraft/NSF fee groups (75 percent and 78 percent, respectively) report having an

⁵⁴ See Pew Charitable Trusts 2015. A more recent analysis using 2019 data from the MEM survey found that slightly more—roughly 67 percent—of consumers experienced an income or expense shock in the prior year (Ratcliffe, Knoll, Kazar, Kennedy, and Rush 2020).

⁵⁵ A credit card limit is the maximum amount a consumer can spend on their credit card(s), credit card balance is the amount a consumer owes on their credit card(s), and credit card utilization is the share of available credit that has been spent.

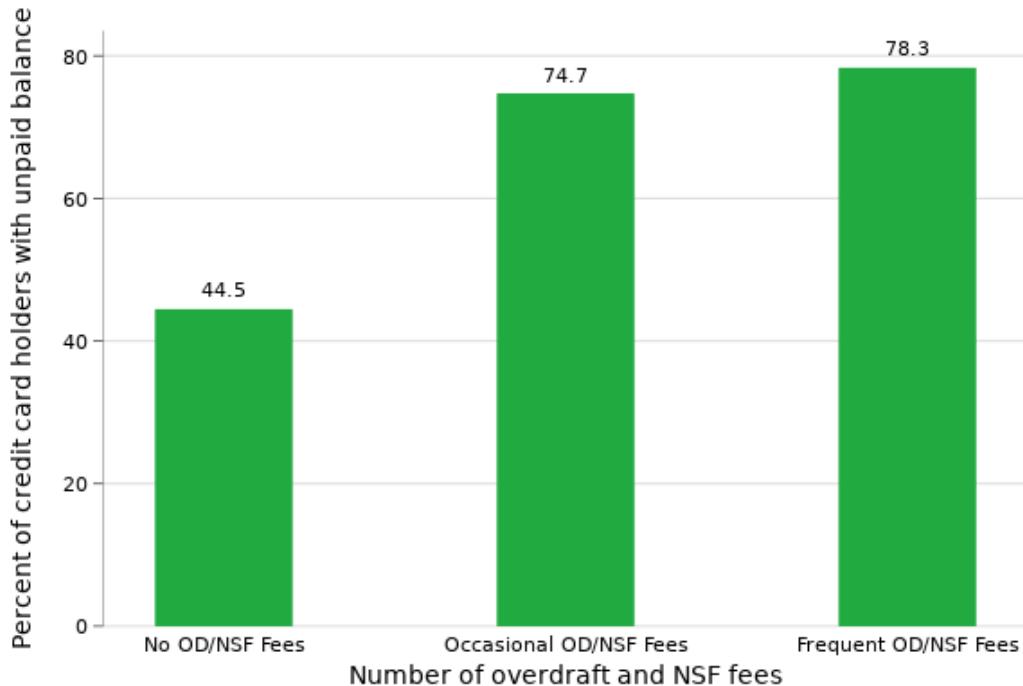
⁵⁶ For credit scoring purposes, the typical recommendation is for consumers to keep their credit card utilization rate below 30 percent. See CFPB resource on “How do I get and keep a good credit score?” available at <https://www.consumerfinance.gov/ask-cfpb/how-do-i-get-and-keep-a-good-credit-score-en-318/>.

⁵⁷ Looking over time from January 2021 through February 2023, there is also a gap in credit card utilization between the three overdraft/NSF fee groups.

⁵⁸ Consumers who do not pay their credit card balance in full carry that balance forward to the next month and pay interest to the provider extending credit. The average credit card annualized interest rate is over 20 percent (see <https://www.consumerfinance.gov/about-us/blog/credit-card-debt-hits-new-high-cfpb-is-focusing-on-ways-to-increase-competition-and-reduce-costs/> and <https://www.federalreserve.gov/releases/g19/current/>). Thus, carrying a balance forward is a relatively high-cost form of credit and can indicate that the credit card holder is not in a financial position to pay the amount owed in full.

unpaid balance on their credit card after making their last payment (**Figure 11**).⁵⁹ For those with no overdraft or NSF fees in the past year, the rate is much lower at 45 percent. These data suggest that many consumers, but especially those with relatively recent overdraft and/or NSF fees, may be attempting to meet financial obligations by leaving credit card balances unpaid.

FIGURE 11: PERCENT OF CREDIT CARD HOLDERS WITH AN UNPAID BALANCE AFTER MAKING THE LAST PAYMENT BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR



Notes: Information on having an unpaid balance is from the MEM data. Differences between the (1) "No" and "Occasional" OD/NSF fee groups and (2) "No" and "Frequent" OD/NSF fee groups are statistically significant at the 0.01 level. Other differences are not statistically significant.

5.3 Home, auto, and student loans

Beyond credit cards, consumers can access credit to buy a home or car, or advance educational credentials. Here we look at the percent of consumers in the three overdraft/NSF fee groups who hold home, auto, and student loan debt.

⁵⁹ Information on unpaid balances is from the MEM survey. Among credit card holders in our sample, 53 percent report having an unpaid balance on their credit card after making their last payment. This is lower than the share of accounts (60 to 79 percent) with a balance that was not paid in full by the immediately prior statement due date (Consumer Financial Protection Bureau 2021).

The share of consumers with a mortgage—consistent with higher credit scores—is highest among consumers in the no overdraft/NSF fee group (36 percent) and lowest among consumers in the frequent overdraft/NSF fee group (20 percent; **Table 4**).⁶⁰ This is consistent with data in the MEM survey that shows lower homeownership rates among consumers with more overdraft and/or NSF fees. The share of consumers who live in a home that they or someone else in the household owns is 67 percent, 55 percent, and 47 percent for those in the no, occasional, and frequent overdraft/NSF fee groups, respectively.⁶¹

TABLE 4: PERCENT OF CONSUMERS WITH A MORTGAGE, AUTO LOAN, AND STUDENT LOAN BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR

Overdraft (OD) and NSF Fees (past year)	No OD/NSF Fees	Occasional OD/NSF Fees	Frequent OD/NSF Fees
<i>Have loan type (%)</i>			
Mortgage	35.5	25.0***	20.3***
Auto	32.3	40.2*	37.3*
Student	17.2	28.1***	28.6***

Notes: Loan information presented in this table is from the CCP data for February 2023. For information on the share of mortgage holders (and auto loan and student loan holders) who are in each of the three OD/NSF fee groups, see **Appendix A, Table 9**.

*/**/*** differs significantly from “no OD/NSF fees” group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from “occasional OD/NSF fees” group at the 0.10/0.05/0.01 level.

Turning to auto and student loans, we find a different pattern: consumers in the no overdraft/NSF fee group are the least likely to hold these loans, while consumers in the occasional and frequent overdraft/NSF fee groups hold these loans at similar rates. The larger difference between the no overdraft/NSF fee group and the other two groups occurs in the share of consumers with a student loan. While 17 percent of consumers in the no overdraft/NSF fee group have a student loan, the share with a student loan is about 65 percent higher (at 28 to 29 percent) for the other two groups.⁶² This pattern exists despite the fact that consumers in the no overdraft/NSF fee group are the most likely to hold a degree beyond high school. While 61 percent of consumers in the no overdraft/NSF fee group have a degree beyond high school (vocational degree, or two- or four-year college degree), this is significantly less common among consumers in the occasional (53 percent) and frequent (43 percent) overdraft/NSF fee groups

⁶⁰ We also examine the share of mortgage holders in each of the three overdraft/NSF fee groups. Among mortgage holders, the share of consumers in the no, occasional, and frequent overdraft/NSF fee groups are 82 percent, 6 percent, and 12 percent, respectively (**Appendix A, Table 9**).

⁶¹ Homeownership is based on a MEM survey question that asks whether the consumer’s residence is owned by them or someone else in their household (see Fulford et al. 2023 for the MEM survey questions, Appendix E p. 47). Mortgage information is measured at the consumer-level and based on credit bureau data.

⁶² We also examine the share of consumers with a student loan (auto loan) in each of the three overdraft/NSF fee groups. Among consumers with a student loan, the shares in the no, occasional, and frequent overdraft/NSF fee groups are 63 percent, 11 percent, and 26 percent, respectively (**Appendix A, Table 9**). Among consumers with an auto loan, the shares are 70 percent, 10 percent, and 20 percent, respectively (**Appendix A, Table 9**).

(see **Appendix A, Table 8**). This student loan debt, particularly among consumers who have student loan debt but no degree, can create financial strain.⁶³

5.4 Applying for and obtaining credit

The percent of consumers that wanted credit but received less than they wanted in the past year increases with the number of overdraft and NSF fees. Using responses to the Making Ends Meet survey (not the credit bureau data), we examine the share of consumers who (1) applied for any type of credit or loan, (2) were turned down for a loan or not given as much credit as they applied for, and (3) did not apply for credit because they thought they would be turned down increases with the number of overdraft and NSF fees.

Looking first at the percent of consumers who applied for credit or a loan in the past year, which indicates a desire for liquidity, we find that roughly a third of consumers (36 percent) in the no overdraft/NSF fee group did so. Among consumers in the occasional and frequent overdraft/NSF fee groups, a majority of consumers—52 percent and 61 percent, respectively—applied for credit or a loan (**Table 5**).

TABLE 5: CREDIT APPLICATIONS BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR

Overdraft (OD) and NSF Fees (past year)	No OD/NSF Fees	Occasional OD/NSF Fees	Frequent OD/NSF Fees
All Consumers			
Applied for Credit (%)	35.7	52.2***	61.2**/+
Consumers who applied for credit			
Rejected or received less than expected	21.4	44.2***	68.4***/+++
Consumers who didn't apply for credit			
Didn't apply because expected denial	10.2	27.8***	43.2***/+++

Notes: Information presented in this table is from the MEM data.

*/**/*** differs significantly from the “no OD/NSF fees” group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from the “occasional OD/NSF fees” group at the 0.10/0.05/0.01 level.

Focusing on the subset of consumers who applied for credit or a loan in the past year, we find much higher denial rates (either no credit or less credit) for consumers with overdraft and/or NSF fees in the past year. Among consumers in the no overdraft/NSF fee group who applied for credit or a loan in the past year, 21 percent report that they were turned down for a loan or not given as much credit as they applied for. This number is about twice as high among consumers

⁶³ See Baum and Johnson (2015). Also, among consumers in the frequent overdraft/NSF group, over a quarter (26 percent) have completed some college but have no degree. The share among consumers with no overdraft/NSF fees is nearly 10 percentage points lower at 17 percent (see **Appendix A, Table 8**).

in the occasional overdraft/NSF fee group (44 percent) and more than three times higher among consumers in the frequent overdraft/NSF fee group (68 percent). These higher rates of denial and constrained availability are consistent with the lower credit scores among consumers with recent overdraft or NSF fees, and indicate financial strain.

We also find that consumers charged overdraft and/or NSF fees in the past year are substantially more likely to report that they did not apply for credit because they thought they would be turned down. Among consumers in the no overdraft/NSF fee group who did not apply for credit or a loan in the past year, 10 percent report that they did not apply for credit because they thought they would be turned down. The number is more than four times higher among consumers in the frequent overdraft/NSF fee group (43 percent).

These higher application and denial rates, along with greater reluctance to apply for credit, suggest greater financial strain and vulnerability among consumers charged overdraft/NSF fees in the past year.

5.5 Use of alternative credit

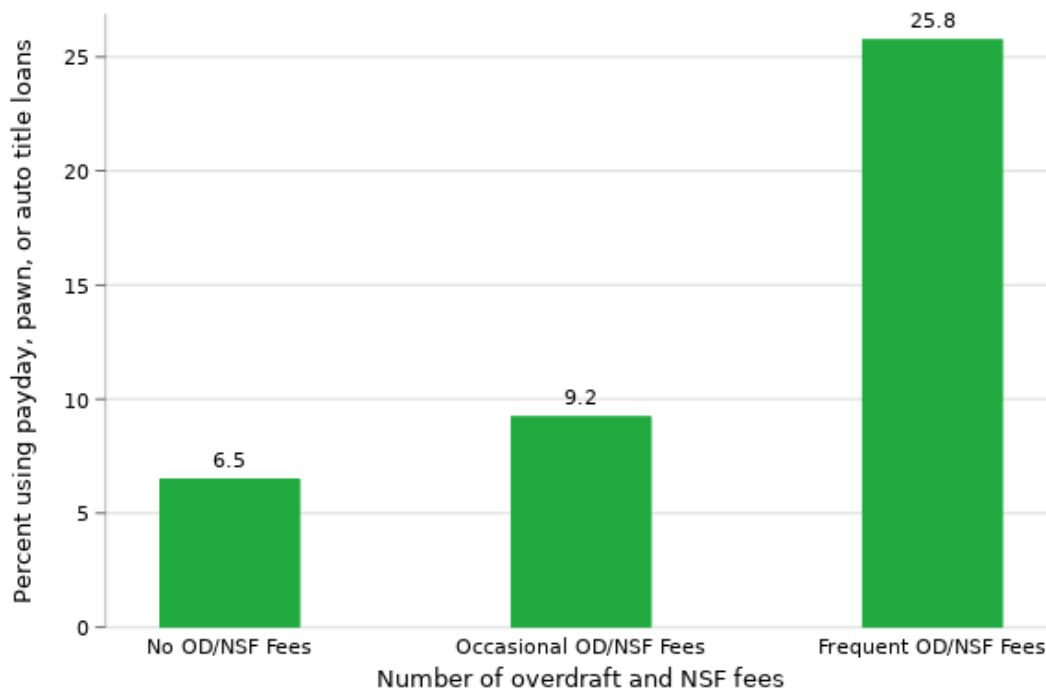
Financially constrained consumers who do not have access to or cannot quickly obtain traditional credit may turn to high-cost alternative forms of credit. Using responses to the Making Ends Meet survey, we examine the share of consumers who took out a payday, auto title, or pawnshop loan in the past year. Use of these alternative loans can signal acute financial strain, both because taking out a high-cost loan indicates distress and the high repayment costs can put additional strain on household finances.⁶⁴

More than a quarter (26 percent) of consumers in the frequent overdraft/NSF fee group report taking out a payday, auto title, or pawnshop loan in the past year (**Figure 12**). Consumers in the other two overdraft/NSF groups also use these high-cost products, but at a substantially lower rate. Specifically, 9 percent of consumers in the occasional overdraft/NSF fee group and 7 percent of consumers in the no overdraft/NSF fee group took out a payday, auto title, or

⁶⁴ The typical payday loan, for example, charges \$15 per \$100 borrowed for 14 days, which translates into an average annual percentage rate (APR) of 391 percent (see “*Payday, Vehicle Title, and Certain High-Cost Installment Loans*,” 82 FR 54472, 54477. Nov. 17, 2017; 2017 Payday Rule and CFPB’s “What are the costs and fees for a payday loan?” available at <https://www.consumerfinance.gov/ask-cfpb/what-are-the-costs-and-fees-for-a-payday-loan-en-1589/>).

pawnshop loan in the past year.⁶⁵ Broadly, this analysis suggests that consumers with multiple overdraft and NSF fees are particularly likely to use high-cost credit.

FIGURE 12: PERCENT OF CONSUMERS WITH A PAYDAY, AUTO TITLE, OR PAWN LOAN BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR



Notes: Information presented in this figure is from the MEM data. Differences between the (1) "No" and "Occasional" OD/NSF fee groups and (2) "No" and "Frequent" OD/NSF fee groups are statistically significant at the 0.01 level. Other differences are not statistically significant.

5.6 Delinquent debt

Delinquent debt signals that a consumer is struggling financially and unable to meet their financial obligations. We examine two broad measures of delinquency obtained from the credit bureau data. First, we examine the share of consumers with debt 60 or more days past due, which is defined as debt resulting from a loan or line of credit (e.g., credit card, mortgage, auto loan, student loan) that is 60 or more days past due and has not been turned over to a third-party debt collector. Second, we examine two measures of third-party debt in collections, which

⁶⁵ The share of people that report taking out a payday or auto title loan (only) in the no, occasional, and frequent overdraft/NSF fee groups are lower at 5.3 percent, 5.9 percent, and 19.3 percent, respectively.

is debt that has been sold to or is being collected on by a third-party debt collector. Unlike past-due debt, collections debt often results from unpaid bills, such as unpaid medical, telecommunications, and utility bills.⁶⁶ For collections debt, we examine the share of consumers with collections debt *excluding* medical collections, as well as the share of consumers with any collections debt. We examine collections debt *excluding* medical collections because the complexity of medical billing processes can result in medical collections debt that consumers do not owe or are unaware that they owe.⁶⁷

The share of consumers with past due debt and collections debt increases as the number of overdraft and NSF fees increase. Focusing first on debt that is 60 or more days past due, 42 percent of consumers in the frequent overdraft/NSF fee group have past due debt. This drops by more than 40 percent—to 24 percent—for consumers in the occasional overdraft/NSF fee group, and by another roughly 45 percent—to 13 percent—for consumers in the no overdraft/NSF fee group (**Table 6**).

TABLE 6: PERCENT OF CONSUMERS WITH PAST DUE AND COLLECTIONS DEBT BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR

Overdraft (OD) and NSF Fees (past year)	No OD/NSF Fees	Occasional OD/NSF Fees	Frequent OD/NSF Fees
Types of delinquent debt (%)			
Debt 60+ days past due	13.3	24.0***	42.2***/+++
Debt in collections (all third party)	13.3	28.0***	38.1***/++
Non-medical debt in collections (third party)	8.7	16.0***	27.1***/+++

Notes: Debt information presented in this table is from the CCP data for February 2023.

*/**/*** differs significantly from “no OD/NSF fees” group at the 0.10/0.05/0.01 level.

+/+/++/+++ differs significantly from “occasional OD/NSF fees” group at the 0.10/0.05/0.01 level.

The share of consumers with any collections debt is somewhat similar to the share with debt past due, although the share with non-medical collections is about 35 percent lower. Among consumers in the frequent overdraft/NSF fee group, 38 percent have collections debt, while 27 percent have non-medical collections debt. These numbers drop by about 10 percentage points—to 28 percent and 16 percent (respectively)—for consumers in the occasional overdraft/NSF fee

⁶⁶ See the CFPB report on third-party debt collection tradelines (Consumer Financial Protection Bureau, February 2023).

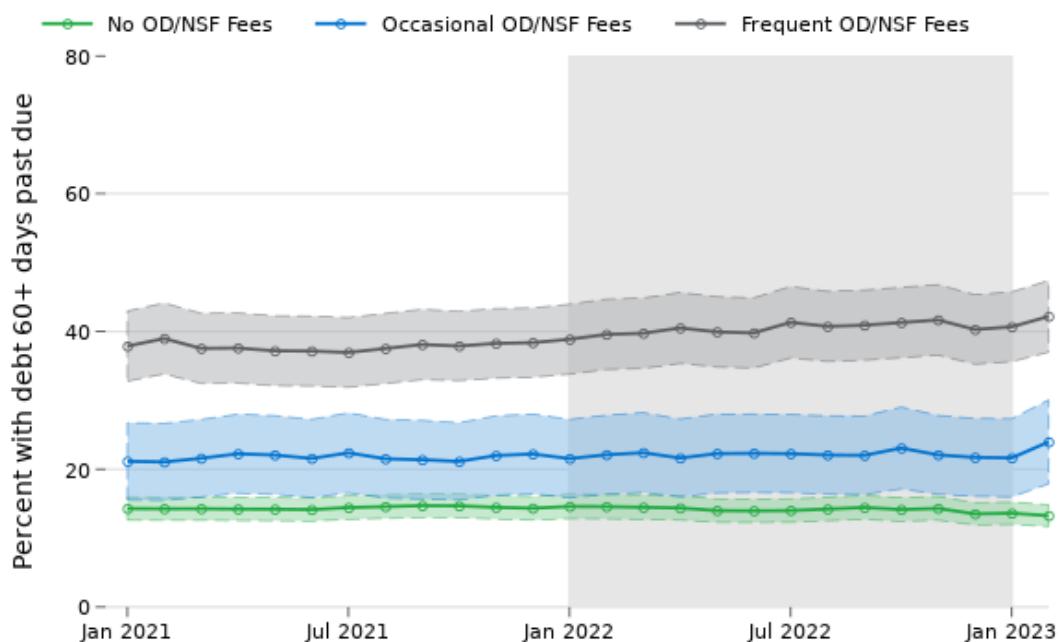
⁶⁷ A 2022 CFPB report on medical debt finds that “complexity of medical billing and reimbursement sometimes results in people being improperly contacted about debts in collections which they do not owe or do not recognize” (Consumer Financial Protection Bureau 2022, p. 13). Consistent with this finding, a 2014 CFPB report on medical debt and credit scores finds that medical collections are less predictive of delinquency than non-medical collections (Brevoort and Kambara 2014).

group, and drop again to 13 percent and 9 percent among those in the no overdraft/NSF fee group.

These results show that past due and collections debt is more common among consumers charged overdraft and/or NSF fees in the past year, but that some consumers in all three overdraft/NSF fee groups have delinquent debt.

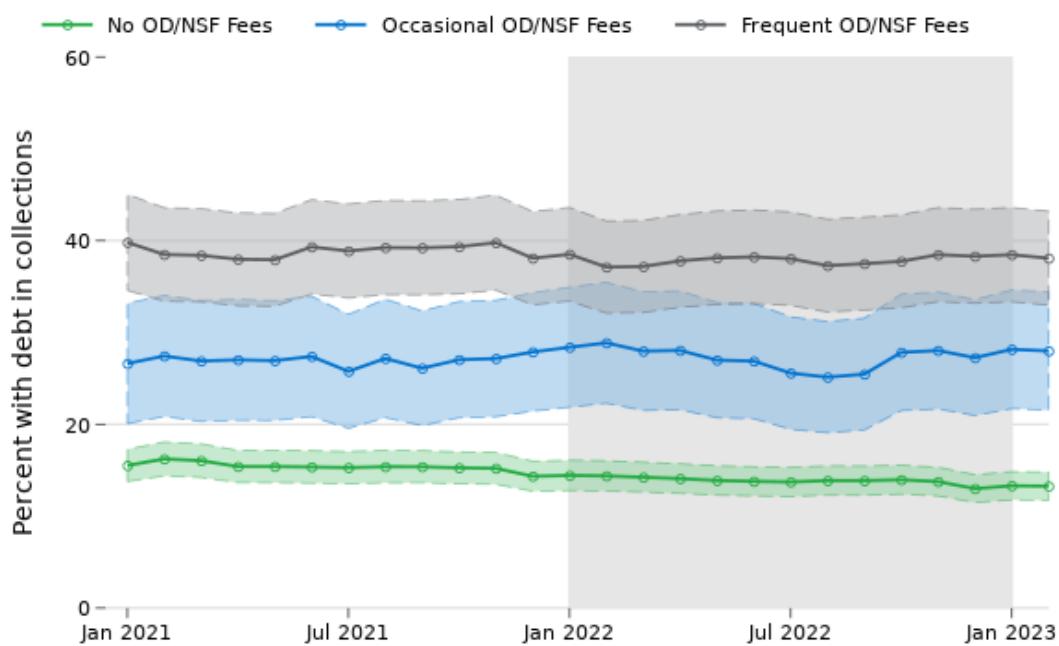
The gap between the three overdraft/NSF groups in the percent with past due and collections debt is relatively stable over time. There is a consistent ordering and spacing between the share of consumers with the different types of debt across the three groups when we look over the roughly two-year period from January 2021 to February 2023 (see **Figures 13 and 14**).

FIGURE 13: PERCENT OF CONSUMERS WITH DEBT 60 OR MORE DAYS PAST DUE OVER TIME BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR



Notes: Delinquent debt information is from the CCP data. The grey shaded area shows the reporting period for consumers' overdraft and NSF activity.

FIGURE 14: PERCENT OF CONSUMERS WITH DEBT IN COLLECTIONS OVER TIME BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR



Notes: Delinquent debt information is from the CCP data. The grey shaded area shows the reporting period for consumers overdraft and NSF activity.

6. Financial strain and well-being by experience with overdraft and NSF fees

Consumers whose account balances are not sufficient to cover charges against the account can struggle to meet their financial obligations and experience financial insecurity. Below we present information on consumers' bank account balances and their saving behavior, followed by a discussion of the extent to which consumers have had difficulty paying bills and their level of financial well-being.⁶⁸ In the appendices, these measures of financial strain and well-being are also presented by the number of overdraft fees (see **Appendix B**) and the number of NSF fees (see **Appendix C**) charged in the past year.

6.1 Account balances and saving behavior

Checking and savings account ownership and balances differ between the three overdraft/NSF fee groups.⁶⁹ Notably, most, but not all, consumers in the occasional and frequent overdraft/NSF fee groups report that they live in a household where someone has a checking or savings account. Specifically, we find that 91 percent of consumers in the frequent overdraft/NSF fee group and 96 percent of consumers in the occasional overdraft/NSF fee group reported that someone in their household had a checking and/or savings account at the time of the survey (**Table 7**). In other words, 9 percent and 4 percent of consumers in these two fee groups (respectively) reported that no one in their household had a checking or savings account. Consumers in the occasional and frequent fee groups without a bank account at the time of the survey could have incurred an overdraft or NSF fee in the past year, and then closed that account or had the account closed by the financial institution before the survey date. However, our estimate of the share of consumers in these two fee groups without a checking or

⁶⁸ All analyses presented in this section are based on the MEM data only.

⁶⁹ The MEM survey first asks respondents "Do you or anyone in your household currently have a checking or savings account?" and then asks "Altogether, about how much money does your household have right now in all of its checking and savings accounts?" These reflect balances at the time the respondent completes the MEM survey; we do not have account balance information over time.

savings account at the time of the survey is higher than expected based on FDIC data,⁷⁰ and could indicate that some consumers are reporting overdraft or NSF fees on other products (e.g., prepaid debit card, peer-to-peer payment services). Additionally, as with any consumer survey, the data could include some measurement error.⁷¹

TABLE 7: ACCOUNT OWNERSHIP, BALANCES, AND SAVING BEHAVIOR BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR

Overdraft (OD) and NSF Fees (past year)	No OD/NSF Fees	Occasional OD/NSF Fees	Frequent OD/NSF Fees
Have checking or savings account (%)	94	95.6	90.8**/++
<i>Checking and savings balance (%)</i>		***	***/+++
Less than \$100	9.5	19.8	29.7
\$100-\$500	7.8	14.0	24.4
\$501-\$1,000	7.1	15.2	18.4
\$1,001-\$5,000	16.0	20.7	17.3
More than \$5,000	59.5	30.3	10.2
<i>Household current non-retirement saving habit (%)</i>		***	***/+++
Not saving now	27.7	40.1	59.8
Saving when possible	43.4	44.4	31.8
Saving regularly	28.9	15.4	8.4
<i>Retirement saving</i>			
Have retirement savings account (%)	71.9	64.4*	51.2***/+++
Currently saving for retirement (%)	53.1	53.3	35.9***/+++

Notes: Information presented in this table is from the MEM data. The “**” and “+” signs in the top “checking and savings balance” row and top “household current non-retirement saving habit” row indicate the level of statistical significance between the OD/NSF fee groups for the checking and savings balance categories and household savings habit categories.

*/**/*** differs significantly from “no OD/NSF fees” group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from “occasional OD/NSF fees” group at the 0.10/0.05/0.01 level.

The amounts consumers report having in checking and savings accounts (combined) decline as the number of overdraft/NSF fees increase. Among consumers with a checking and/or savings account in the frequent overdraft/NSF fee group, roughly half (54 percent) report having no more than \$500 in their account(s), with 30 percent having less than \$100 and 24 percent having between \$100 and \$500 (**Table 7**). Turning to account holders in the occasional

⁷⁰ Data from the FDIC’s 2021 survey of unbanked and underbanked households suggests that 0.5 percent of households lost access to their bank account(s) in the preceding year (Federal Deposit Insurance Corporation 2022, p. 3). This share is almost certainly higher for consumers that frequently attempt transactions with insufficient funds in their account, as frequent overdrafts or NSF transactions are an often-cited reason by financial institutions for deposit account closures.

⁷¹ Measurement error, which is the difference between the true and reported value for a variable, could exist for respondents answers to the savings and checking account question and/or the overdraft and NSF questions.

overdraft/NSF fee group, roughly one-third (34 percent) report having account balances of no more than \$500 (20 percent have less than \$100 and 14 percent have between \$100 and \$500). Since checking account balances likely include money earmarked for bills, such as housing and food costs, these findings suggest that many consumers with recent overdraft and/or NSF fees are living with little or no financial buffer. Among account holders in the no overdraft/NSF fee group, more than half (60 percent) have account balances of more than \$5,000, with 17 percent having balances of \$500 or less.

There are also substantial differences in the non-retirement saving behavior of consumers in households with and without overdraft and/or NSF fees in the past year, likely due to lower incomes and other financial pressures.⁷² Among consumers in the frequent overdraft/NSF fee group, 60 percent report that they were not saving (outside of retirement saving) at the time of the survey, with only 8 percent reporting that they save regularly (**Table 7**). Among consumers in the no overdraft/NSF fee group, much higher shares report they are saving—29 percent report that they are saving regularly and 43 percent report that they are saving when possible.

Saving for retirement and having retirement savings also differs across the three overdraft/NSF fee groups. Among consumers in the frequent overdraft/NSF fee group, 51 percent have a retirement savings account and 36 percent are currently saving for retirement. Among consumers in the no overdraft/NSF fee group, the shares are 40 to 50 percent higher—72 percent and 53 percent, respectively.

6.2 Difficulty paying bills and managing an income shock

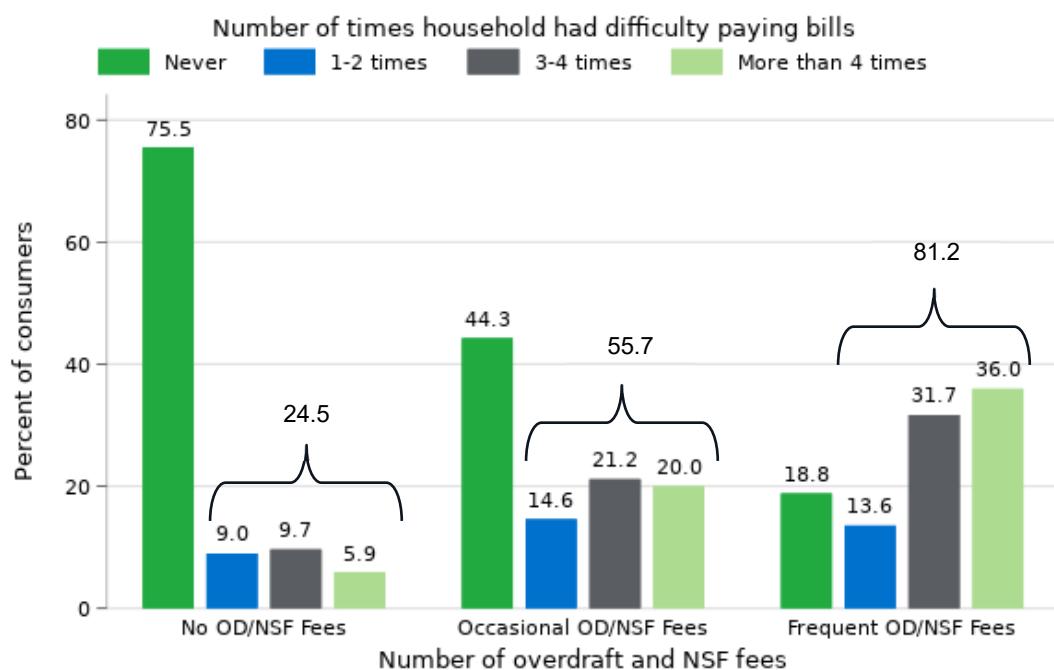
Reports of unpaid credit card balances and use of alternative credit, such as payday and auto title loans, may reflect a struggle to pay for expenses, including recurring expenses. Consistent with the discussion above, we find that consumers charged overdraft and/or NSF fees in the past year are more likely to have had difficulty paying for bills in the past year and are less prepared for an income shock.

Most consumers (81 percent) in the frequent overdraft/NSF fee group report having difficulty paying a bill at least once in the past year (**Figure 15**). This drops to a bit more than half (56 percent) among those in the occasional overdraft/NSF fee group, and to a quarter (25 percent) among those in the no overdraft/NSF fee group. Again, this analysis shows that while

⁷² See Section 4 for discussion of income differences.

consumers in the no overdraft/NSF fee group are better off than those in the other two fee groups, a sizeable share of consumers in the no overdraft/NSF fee group struggle financially.

FIGURE 15:HOUSEHOLD DIFFICULTY PAYING BILLS IN THE PAST YEAR BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR



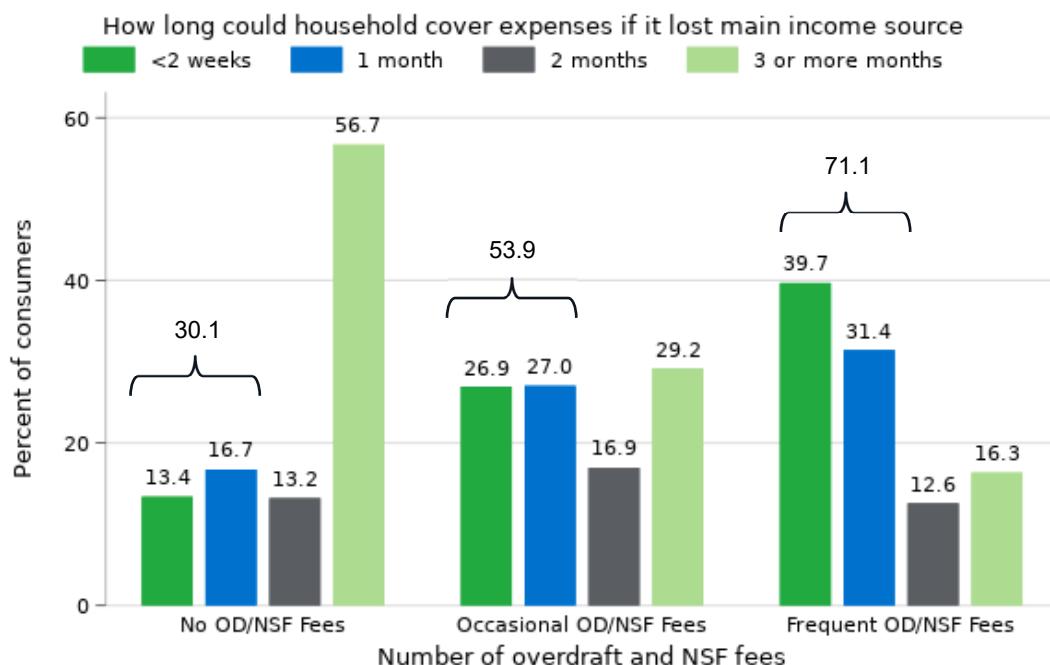
Notes: Information presented in this figure is from the MEM data. Differences between the (1) "No" and "Occasional" OD/NSF fee groups, (2) "No" and "Frequent" OD/NSF fee groups, and (3) "Occasional" and "Frequent" fee groups are statistically significant at the 0.01 level.

We also find that those charged overdraft and/or NSF fees in the past year experience trouble paying bills more often in the past year. Those in the frequent overdraft/NSF fee group struggled to pay bills repeatedly, with 32 percent having trouble three or four times and 36 percent having trouble five or more times in the past year. Struggling five or more times is less likely for those in the occasional overdraft/NSF fee group (20 percent) and for those in the no overdraft/NSF fee group (6 percent).

We also examine how long households could cover expenses (by borrowing, using savings, selling assets, or seeking help from family or friends) if they lost their main source of income. The ability of consumers to sustain themselves in the event of an unexpected income loss is much lower among those in households charged an overdraft and/or NSF fee in the past year. Among consumers in the frequent overdraft/NSF fee group, the majority (71 percent) could cover expenses for no more than one month, with 40 percent reporting that they could cover

expenses for less than two weeks and another 31 percent reporting they could cover expenses for about one month (**Figure 16**). Among consumers in the occasional overdraft/NSF fee group roughly half (54 percent) could cover expenses for no more than one month, with the share dropping to about one-third (30 percent) among consumers in the no overdraft/NSF fee group. If we instead look at the share of consumers who could cover their expenses for at least three months, the shares are 57 percent, 29 percent, and 16 percent for consumers in the no, occasional, and frequent overdraft/NSF fee groups, respectively.

FIGURE 16: LENGTH OF TIME HOUSEHOLD COULD COVER EXPENSES IF LOST MAIN INCOME SOURCE BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR



Notes: Information presented in this figure is from the MEM data. Differences between the (1) “No” and “Occasional” OD/NSF fee groups, (2) “No” and “Frequent” OD/NSF fee groups, and (3) “Occasional” and “Frequent” fee groups are statistically significant at the 0.01 level.

These analyses suggest a high level of financial vulnerability—both paying bills today and weathering unexpected future shocks—among many consumers incurring overdraft or NSF fees, particularly those with frequent occurrences.

6.2.1 Financial well-being

We find lower levels of financial well-being among consumers charged more overdraft and NSF fees in the past year. The CFPB’s financial well-being (FWB) scale gives a score that reflects a

consumer's impression of their financial circumstances. The FWB scores range from a low of 19 to a high of 90, though most scores fall in the range of 30 to 70.⁷³ Even a 10-point change reflects meaningful differences in consumer financial conditions—for example, there is a 10-point difference between those with household income of less than \$20,000 (average score of 46) and those with household income of \$75,000-\$99,999 (average score of 56).⁷⁴

We find a difference of nearly 12 points in the average FWB score across the three overdraft/NSF fee groups.⁷⁵ As seen in **Figure 17**, those in the frequent overdraft/NSF fee group have an average FWB score of 42, while those in the occasional overdraft/NSF fee group have an average FWB score 5 points higher (47). Those in the no overdraft/NSF fee group have an average FWB score of 54—about 7 points higher than the middle group.⁷⁶

To draw a sharper focus on one element of the FWB scale, we separately examine how consumers respond to the FWB question about how often “my finances control my life.” Most consumers (63 percent) in the frequent overdraft/NSF fee group report that finances control their lives often or always, while 42 percent of those in the occasional overdraft/NSF fee group and 31 percent of those in the no overdraft/NSF fee group report that this statement describes them often or always (**Figure 17**).

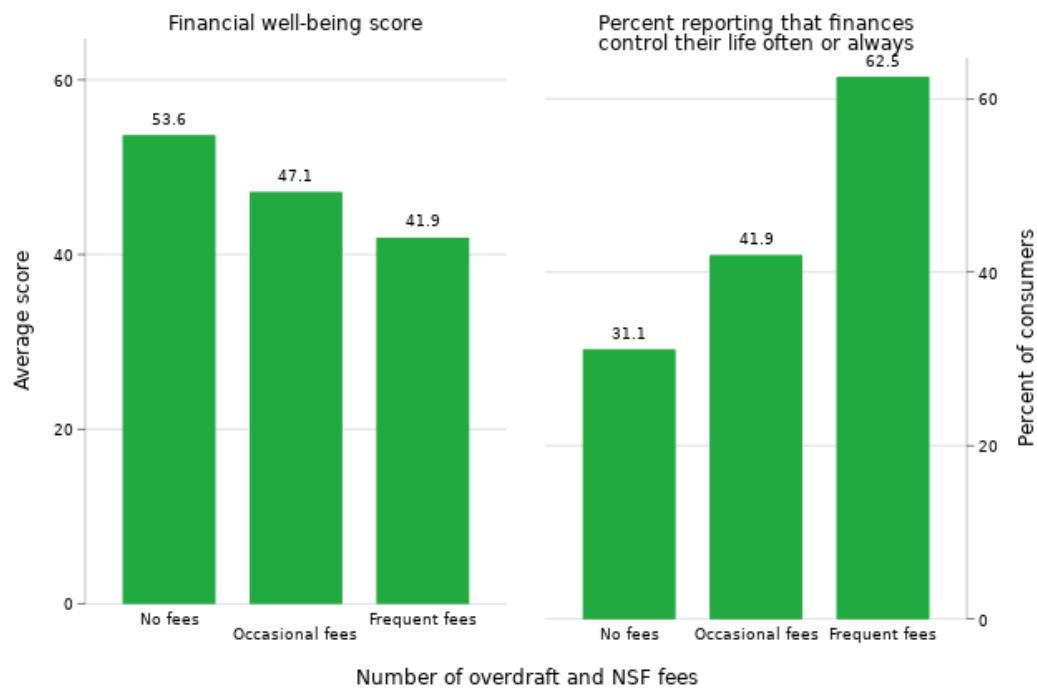
⁷³ The MEM survey includes the abbreviated 5-item (versus the full 10-item) FWB scale. The CFPB’s 2017 report on “Financial well-being in America” shows that scores range from 37 to 72 from the 10th to 90th percentiles (Consumer Financial Protection Bureau, September 2017; p. 28, Table 3).

⁷⁴ See Consumer Financial Protection Bureau, September 2017 (p. 77, Table A4).

⁷⁵ We find a 10-point difference in the median FWB score. The median scores for the three groups (no, occasional, and frequent overdraft/NSF fee groups) are 53, 48, and 43, respectively.

⁷⁶ The average financial well-being score for U.S. adults from the CFPB’s 2016 National Financial Well-Being Survey (NFWBS) is 54 (Consumer Financial Protection Bureau, September 2017, p. 5). Beyond the difference in years, the NFWBS is nationally representative of U.S. adults and the MEM survey is nationally representative of U.S. adults with a credit bureau record.

FIGURE 17: FINANCIAL WELL-BEING AND PERCENT REPORTING FINANCES CONTROL THEIR LIFE BY NUMBER OF OVERDRAFT AND NSF FEES IN THE PAST YEAR



Notes: Information presented in this figure is from the MEM data. For both FWB measures, all differences are statistically significant at the 0.01 level.

7. Conclusion

This report describes the experiences of consumers with overdraft and NSF fees during a period of rapid change in the consumer deposits industry. We use the 2023 Making Ends Meet survey, a detailed survey of consumers' finances linked to administrative credit records, to explore the characteristics of consumers in households charged overdraft and/or NSF fees over a one-year period. These data allow us to investigate how consumers charged different levels of overdraft and NSF fees compare to each other in terms of their demographic and socio-economic characteristics, as well as their credit and debt characteristics, such as credit availability, credit utilization, and credit scores.

Despite many financial institutions making changes to their overdraft and NSF policies in recent years, we find that consumers continue to be affected by these fees. In the year preceding the MEM survey (roughly calendar year 2022), we find that 20.0 percent of consumers reside in a household that was charged at least one *NSF fee*, 23.6 percent reside in a household that was charged at least one *overdraft fee*, and 26.5 percent reside in a household that was charged at least one *NSF or overdraft fee*. These numbers show a high degree of overlap in the populations of consumers charged overdraft and NSF fees, indicating that most consumers charged one fee are also charged the other fee. The economic burden of these fees can be substantial. With an estimated median overdraft fee of \$35, the typical consumer with more than 10 overdraft fees would be charged at least \$385, putting additional financial pressure on consumers struggling to make ends meet.

We show that consumers charged overdraft and NSF fees are more likely to be economically disadvantaged. About 18 percent of consumers with an annual household income between \$100,001 and \$175,000 were in households charged an overdraft or NSF fee in the past year, while the share is nearly twice as high (35 percent) for consumers with incomes between \$35,001 and \$65,000. Consistent with differences by household income, we also find meaningful differences in overdraft and NSF fees across consumers' credit and debt profiles. Consumers who are more frequently charged overdraft and NSF fees have lower average credit scores, are more likely to have no available credit, use alternative credit (e.g., payday or auto title loan) and have delinquent debt. We also find that consumers charged these fees have more difficulty paying bills, are less prepared to weather an income shock, and have lower financial well-being.

The findings presented in this report help us to better understand the circumstances faced by consumers in households charged overdraft and NSF fees. Many of these consumers appear to have some credit available on a credit card during the period these fees are assessed, though credit card payments may not be a feasible option for all potential consumer expenditures.

Consumers might prefer to avoid or delay the transactions that lead to overdraft and NSF fees, or to use alternative payment methods to cover the transactions.

Our analyses also suggest that many of the consumers in households charged overdraft and NSF fees were surprised by their most recent overdraft or NSF fee. Among consumers in households charged an overdraft fee in the past year, 43 percent were surprised by their most recent account overdraft, while 35 percent thought it was possible and 22 percent expected it. We also find that consumers in households with more overdraft and NSF fees were less likely to be surprised by their most recent overdraft or NSF fee and more likely to expect it. For example, 15 percent of consumers from households charged 1 to 3 overdraft fees expected their most recent transaction to overdraft; this contrasts sharply with consumers from households charged more than 10 overdraft fees, of which more than half (56 percent) expected their most recent overdraft.

Together, the results present a varied picture of consumer experiences with overdraft and NSF fees. On the one hand, a sizeable group of consumers report being surprised by overdrafts and may also have access to cheaper credit on a credit card. On the other hand, some consumers appear to use overdrafts often and intentionally as a source of credit, even with their high cost. Despite their use as credit, most account overdrafts are exempt from the Truth in Lending Act's Regulation Z, which is designed to promote the informed use of credit and make it easier for consumers to compare the cost of credit products. In addition, NSF fees continue to affect consumers despite recent changes in market practices and despite not providing consumers any particular benefit.

8. References

- Baum, Sandy and Martha Johnson. 2015. *Student Debt: Who Borrows Most? What Lies Ahead?* Urban Institute. <https://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000191-Student-Debt-Who-Borrows-Most-What-Lies-Ahead.pdf>.
- Beegle, Kathleen, Joachim De Weerdt, Jed Friedman, and John Gibson. 2012. *Methods of household consumption measurement through surveys: Experimental results from Tanzania*. Journal of Development Economics, 98: 3-18.
- Aladangady, Aditya, Andrew C. Chang, and Jacob Krimmel. 2023. *Greater Wealth, Greater Uncertainty: Changes in Racial Inequality in the Survey of Consumer Finances*. FEDS Notes, Board of Governors of the Federal Reserve System. <https://www.federalreserve.gov/econres/notes/feds-notes/greater-wealth-greater-uncertainty-changes-in-racial-inequality-in-the-survey-of-consumer-finances-20231018.html>.
- Brevoort, Kenneth P., Philipp Grimm, and Michelle Kambara. 2015. *Credit Invisibles*. Consumer Financial Protection Bureau, Data Point. <https://www.consumerfinance.gov/data-research/research-reports/data-point-credit-invisibles/>.
- Brevoort, Kenneth P. and Michelle Kambara. 2014. *Medical debt and credit scores*. CFPB Data Point. https://files.consumerfinance.gov/f/201405_cfpb_report_data-point_medical-debt-credit-scores.pdf.
- Consumer Financial Protection Bureau. February 2023. “*Market Snapshot: An Update on Third-Party Debt Collections Tradelines Reporting*.” https://files.consumerfinance.gov/f/documents/cfpb_market-snapshot-third-party-debt-collections-tradelines-reporting_2023-02.pdf.
- Consumer Financial Protection Bureau. May 2023. “*Overdraft/NSF revenue down nearly 50% versus pre-pandemic levels*.” CFPB Data Spotlight. <https://www.consumerfinance.gov/data-research/research-reports/data-spotlight-overdraft-nsf-revenue-in-q4-2022-down-nearly-50-versus-pre-pandemic-levels/>.
- Consumer Financial Protection Bureau. October 2023. *Vast majority of NSF fees have been eliminated, saving consumers nearly \$2 billion annually*. CFPB Data Spotlight. <https://www.consumerfinance.gov/data-research/research-reports/vast-majority-of-nsf-fees-have-been-eliminated-saving-consumers-nearly-2-billion-annually/>.
- Consumer Financial Protection Bureau. February 2022. *Medical Debt Burden in the United States*. https://files.consumerfinance.gov/f/documents/cfpb_medical-debt-burden-in-the-united-states_report_2022-03.pdf.

- Consumer Financial Protection Bureau. 2021. *The Consumer Credit Card Market*. https://files.consumerfinance.gov/f/documents/cfpb_consumer-credit-card-market-report_2021.pdf.
- Consumer Financial Protection Bureau. August 2017. *Frequent Overdrafters*. CFPB Data Point. https://files.consumerfinance.gov/f/documents/201708_cfpb_data-point_frequent-overdrafters.pdf.
- Consumer Financial Protection Bureau. September 2017. *Financial Well-Being in America*. https://files.consumerfinance.gov/f/documents/201709_cfpb_financial-well-being-in-America.pdf.
- Consumer Financial Protection Bureau. November 2017. *Consumer voices on overdraft programs*. https://files.consumerfinance.gov/f/documents/cfpb_consumer-voices-on-overdraft-programs_report_112017.pdf.
- Consumer Financial Protection Bureau. December 2016. *Who are the credit invisibles?* https://files.consumerfinance.gov/f/documents/201612_cfpb_credit_invisible_policy_report.pdf.
- Consumer Financial Protection Bureau. July 2014. *Checking Account Overdraft*. CFPB Data Point. https://files.consumerfinance.gov/f/201407_cfpb_report_data-point_overdrafts.pdf.
- Falgout, MK, Meghan Greene, Necati Celik. 2023. *Overdraft Trends Amid Historic Policy Shifts*. Financial Health Network. <https://finhealthnetwork.org/research/overdraft-trends-amid-historic-policy-shifts/>.
- Federal Deposit Insurance Corporation (FDIC). October 2022. *2021 FDIC National Survey of Unbanked and Underbanked Households*. <https://www.fdic.gov/analysis/household-survey/2021report.pdf>.
- Fulford, Scott, Samyak Jain, Greta Li, Elizabeth Saunders, and Eric Wilson. 2022. *Making Ends Meet Survey 2022, Insights from the CFPB Making Ends Meet Survey*. Consumer Financial Protection Bureau. https://files.consumerfinance.gov/f/documents/cfpb_making-ends-meet-in-2022_report_2022-12.pdf.
- Fulford, Scott, and Marie Rush. 2020. *Insights from the Making Ends Meet Survey*. Consumer Financial Protection Bureau. https://files.consumerfinance.gov/f/documents/cfpb_making-ends-meet_survey-results_2020-07.pdf.
- Fulford, Scott, Eric Wilson, Zoe Kruse, Emma Kalish, and Isaac Cotter. 2023. *Making Ends Meet in 2023: Insights from the Making Ends Meet Survey*. Consumer Financial Protection Bureau, Office of Research Publication No. 2023-8. <https://www.consumerfinance.gov/data-research/research-reports/making-ends-meet-in-2023-insights-from-the-making-ends-meet-survey/>

Greene, Meghan, Wanjira Chege, MK Falgout, and Necati Celik. 2023. *FinHealth Spend Report 2023: U.S. Household Spending on Financial Services Amid Historic Inflation and an Uncertain Economy*. Financial Health Network. <https://finhealthnetwork.org/wp-content/uploads/2023/06/Spend-Report-2023-Final.pdf>.

Pew Charitable Trusts. 2015. *The Role of Emergency Savings in Family Financial Security: How Do Families Cope with Financial Shocks?* https://www.pewtrusts.org/-/media/assets/2015/10/emergency-savings-report-1_artfinal.pdf.

Ratcliffe, Caroline, Patrick Heck, Jeremy Burke, Misha Davies, Maxwell Kennedy, and Eric Wilson. 2023. *Insights into Consumers' Financial Standing and Distress from 2019-2022: Evidence from a CDFI*. CFPB Staff Report No. 2023-01. Consumer Financial Protection Bureau. https://files.consumerfinance.gov/f/documents/cfpb_consumers-financial-standing-distress_southern-bancorp-bank_2023-04.pdf

Ratcliffe, Caroline, Melissa Knoll, Leah Kazar, Maxwell Kennedy, and Marie Rush. 2020. *Perceived Financial Preparedness, Savings Habits, and Financial Security*. Consumer Financial Protection Bureau. https://files.consumerfinance.gov/f/documents/cfpb_perceived-financial-preparedness-saving-habits-and-financial-security_2020-09.pdf.

APPENDIX A: SUPPLEMENTAL TABLES AND FIGURES FOR THREE OVERDRAFT/NSF (COMBINED) FEE GROUPS

A.1 Socio-economic and demographic characteristics

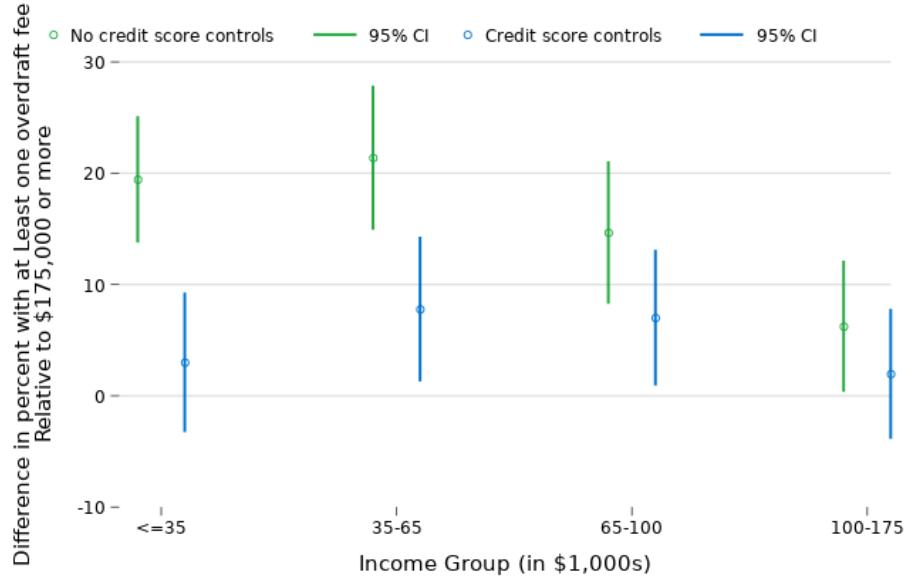
In Section 4, we examine the level of overdraft/NSF fees by selected consumer socio-economic and demographic characteristics (i.e., we present row percentages). Table 8 presents the socio-economic and demographic characteristics for each of the three overdraft/NSF fee groups (column percents).

TABLE 8: SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS BY OVERDRAFT AND NSF FEE GROUP

Overdraft (OD) and NSF Fees (past year)	No OD/NSF Fees	Occasional OD/NSF Fees	Frequent OD/NSF Fees
Household Income (%)			
\$35,000 or less	25.6	27.8	38.2
\$35,001-\$65,000	19.0	27.3	28.2
\$65,001 - \$100,000	20.4	21.7	19.1
\$100,001-\$175,000	21.5	16.7	11.5
\$175,001 or more	13.6	6.4	3.0
<i>Total sum, by column</i>	100	100	100
Highest Level Education (%)			
High school or less	22.1	29.0	31.7
Some college but no degree	17.4	18.1	25.7
Two-year degree or vocational	15.5	11.6	19.6
College degree or postgraduate	45.1	41.4	23.0
<i>Total sum, by column</i>	100	100	100
Age (%)			
Younger than 35	21.7	37.7	30.1
35 to 54	32.2	34.3	43.0
55 to 61	11.5	10.8	10.8
62 and older	34.6	17.3	16.0
<i>Total sum, by column</i>	100	100	100
Race and Ethnicity (%)			
White, non-Hispanic	65.5	59.4	48.3
Black, non-Hispanic	10.4	16.5	17.5
Hispanic	14.3	16.3	24.0
Other	8.9	6.1	7.0

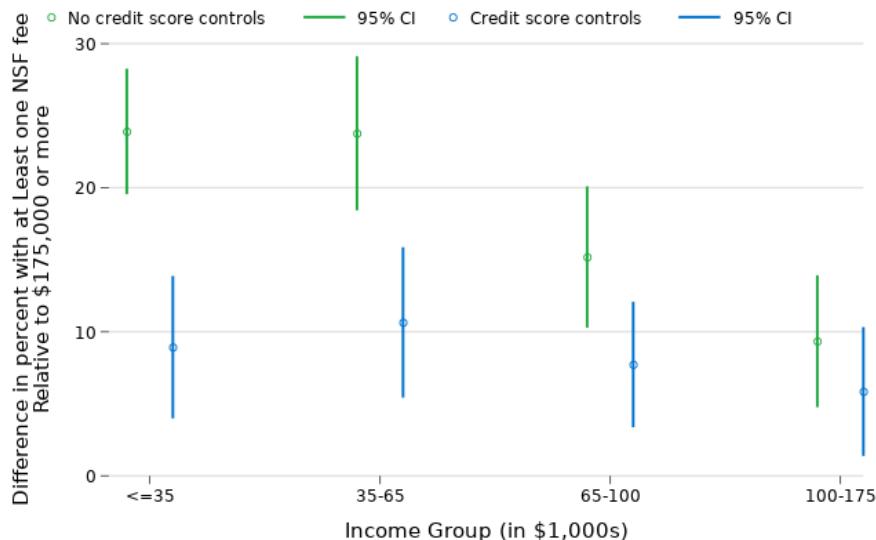
Overdraft (OD) and NSF Fees (past year)	No OD/NSF Fees	Occasional OD/NSF Fees	Frequent OD/NSF Fees
<i>Total sum, by column</i>	100	100	100
Gender (%)			
Male	52.0	44.7	37.3
Female	48.0	55.3	62.7
<i>Total sum, by column</i>	100	100	100
Married or living with Partner (%)			
No	35.9	39.7	47.1
Yes	64.1	60.3	52.9
<i>Total sum, by column</i>	100	100	100
Household has Children (%)			
No Children	66.7	60.7	47.3
Has Children	33.3	39.3	52.7
<i>Total sum, by column</i>	100	100	100
Military Service (%)			
No military service	87.9	93.0	93.3
Some military service	12.1	7.0	6.7
<i>Total sum, by column</i>	100	100	100
Geographic Group (%)			
Urban	85.1	83.8	83.6
Some urban	10.2	11.5	10.7
Rural	4.6	4.7	5.6
<i>Total sum, by column</i>	100	100	100

FIGURE 18: HOUSEHOLD INCOME AND THE LIKELIHOOD OF OVERDRAFT INCIDENCE



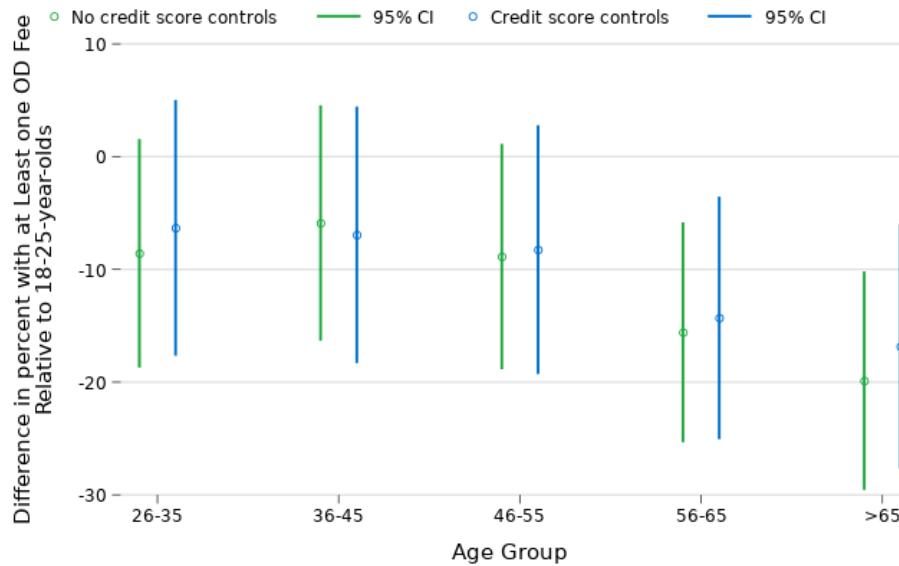
Notes: Figure presents household income group point estimates and 95% confidence intervals from ordinary least squares (OLS) regressions of an indicator for whether the consumer resided in a household charged at least one overdraft fee in the last year on a set of indicators for whether the consumer was in a household with income $\leq \$35,000$, $\$35,000-\$65,000$, $\$65,000-\$100,000$, $\$100,000-\$175,000$, or more than $\$175,000$, with more than $\$175,000$ as the omitted category. The “credit score controls” scatter plot and 95% confidence intervals additionally control for the consumer’s credit score and interactions between the consumer’s credit score and indicators for whether the credit score was deep subprime, subprime, near prime, prime, or super prime.

FIGURE 19: HOUSEHOLD INCOME AND THE LIKELIHOOD OF NSF INCIDENCE



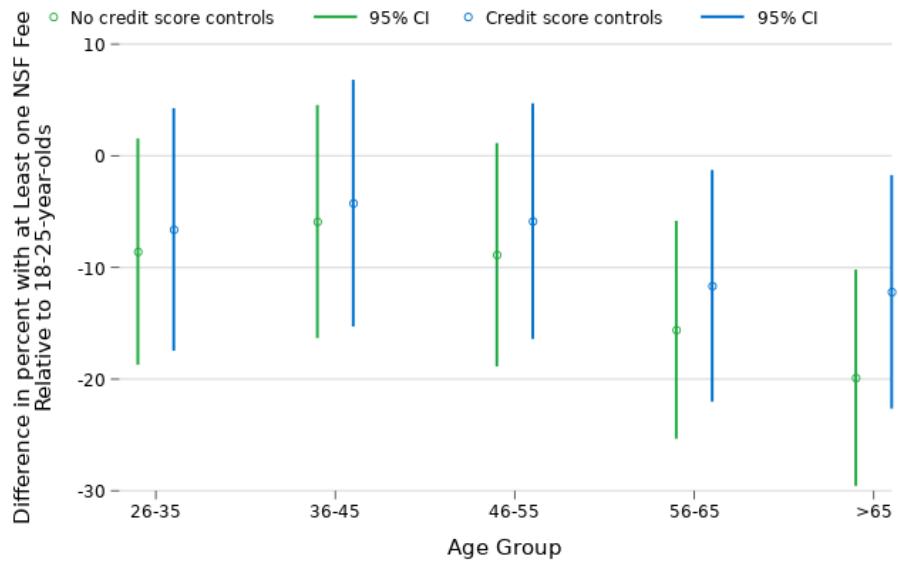
Notes: Figure presents household income group point estimates and 95% confidence intervals from OLS regressions of an indicator for whether the consumer resided in a household that was charged at least one NSF fee in the last year on a set of indicators for whether the consumer was in a household with income $\leq \$35,000$, $\$35,000-\$65,000$, $\$65,000-\$100,000$, $\$100,000-\$175,000$, or more than $\$175,000$, with more than $\$175,000$ as the omitted category. The “credit score controls” scatter plot and 95% confidence intervals additionally control for the consumer’s credit score and interactions between the consumer’s credit score and indicators for whether the credit score was deep subprime, subprime, near prime, prime, or super prime.

FIGURE 20: CONSUMER AGE AND THE LIKELIHOOD OF OVERDRAFT INCIDENCE



Notes: Figure presents age-group point estimates and 95% confidence intervals from OLS regressions of an indicator for whether the consumer resided in a household charged at least one overdraft fee in the last year on a set of indicators for whether the consumer was aged 26-35, 36-45, 46-55, 56-65, or older than 65, with aged 18-25 as the omitted category. The “credit score controls” scatter plot and 95% confidence intervals additionally control for the consumer’s credit score and interactions between the consumer’s credit score and indicators for whether the credit score was deep subprime, subprime, near prime, prime, or super prime.

FIGURE 21: CONSUMER AGE AND THE LIKELIHOOD OF NSF INCIDENCE



Notes: Figure presents age-group differences and 95% confidence intervals from OLS regressions of an indicator for whether the consumer resided in a household charged at least one NSF fee in the last year on a set of indicators for whether the consumer was aged 26-35, 36-45, 46-55, 56-65, or older than 65, with aged 18-25 as the omitted category. The “credit score controls” scatter plot and 95% confidence intervals additionally control for the consumer’s credit score and interactions between the consumer’s credit score and indicators for whether the credit score was deep subprime, subprime, near prime, prime, or super prime.

A.2 Credit and debt characteristics

This table presents the share of consumers with a mortgage, auto loan, and student loan who are in each of the three OD/NSF fee groups.

TABLE 9: OVERDRAFT/NSF FEE GROUP FOR CONSUMERS WITH A MORTGAGE, AUTO LOAN, AND STUDENT LOAN

Overdraft (OD) and NSF Fees (past year)	No OD/NSF Fees	Occasional OD/NSF Fees	Frequent OD/NSF Fees
Mortgage (%)			
No Mortgage	69.6	8.8	21.6
Has a Mortgage	81.9	6.3	11.8
Auto Loan (%)			
No Auto Loan	75.3	7.3	17.5
Has an Auto Loan	70.1	9.5	20.3
Student Loan (%)			
No Student Loan	76.3	7.2	16.5
Has a Student Loan	62.6	11.2	26.2

APPENDIX B: TABLES AND FIGURES FOR THE FOUR OVERDRAFT FEE GROUPS

B.1 Socio-economic and demographic characteristics

The two tables below present the socio-economic and demographic characteristics of consumers by the number of overdraft fees in the past year. The first of these tables parallels the table in Section 4 of this report and presents the number of overdraft fees by consumer socio-economic and demographic characteristics (row percentages), while the second table presents these socio-economic and demographic characteristics for each of the four overdraft fee groups (column percents).

TABLE 10: OVERDRAFT FEE GROUPS BY SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS

Overdraft Fees (past year)	OD Fees		1-3 Fees	4-10 Fees	More than 10 Fees
	No	Yes			
Household Income (\$)					
\$35,000 or less	70.9	33.4	17.0	6.8	5.4
\$35,001-\$65,000	69.0	31.0	18.9	7.3	4.9
\$65,001 - \$100,000	75.7	24.3	16.7	5.6	2.0
\$100,001-\$175,000	84.1	15.9	10.0	4.0	1.8
\$175,001 or more	90.4	9.6	7.6	2.0	0.0
Highest Level of Education (%)					
High school or less	71.1	28.9	17.2	6.4	5.3
Some college but no degree	70.3	29.7	18.0	6.2	5.4
Two-year degree or vocational	73.7	26.2	17.3	5.7	3.2
College degree or postgraduate	83.7	16.3	10.9	4.3	1.1
Age (%)					
Younger than 35	68.7	31.3	20.9	5.5	5.0
35 to 54	72.0	28.0	16.3	7.9	3.9
55 to 61	78.0	22.0	14.4	5.6	2.0
62 and older	87.0	13.0	8.2	3.1	1.7
Race and Ethnicity (%)					
White, non-Hispanic	80.0	20.0	12.0	5.3	2.6
Black, non-Hispanic	67.9	32.1	21.2	5.6	5.2
Hispanic	67.6	32.4	23.7	4.7	3.9
Other	81.0	19.0	8.8	8.1	2.1
Gender (%)					
Male	81.1	19.9	13.2	4.4	2.3
Female	72.9	27.1	17.1	6.0	4.0

Overdraft Fees (past year)	OD Fees		1-3 Fees	4-10 Fees	More than 10 Fees
	No	Yes			
Married or living with Partner (%)					
No	72.5	27.5	16.0	6.7	4.8
Yes	78.8	21.2	14.1	4.8	2.3
Household has Children (%)					
No children	81.4	18.6	11.7	4.5	2.4
Has children	68.3	31.7	20.1	6.9	4.8
Military Service (%)					
No military service	75.7	24.3	15.1	5.8	3.3
Some military service	85.5	14.5	9.1	3.1	2.2
Geographic Group (%)					
Urban	76.6	23.4	14.9	5.4	3.1
Some Urban	74.7	25.3	12.4	7.8	5.1
Rural	74.7	25.3	17.6	4.6	3.1

TABLE 11: SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS BY OVERDRAFT FEE GROUP

Overdraft (OD) Fees (past year)	No OD Fees	1-3 Fees	3-10 Fees	More than 10 Fees
Household Income (%)				
\$35,000 or less	26.0	31.7	33.8	45.3
\$35,001-\$65,000	19.4	27.1	27.9	31.9
\$65,001 - \$100,000	20.1	22.6	20.4	12.1
\$100,001-\$175,000	21.3	13.0	13.8	10.7
\$175,001 or more	13.2	5.6	4.1	0.0
<i>Total sum, by column</i>	100.0	100.0	100.0	100.0
Highest Level Education (%)				
High school or less	22.5	28.1	28.6	39.6
Some college but no degree	17.4	23.1	21.8	31.6
Two-year degree or vocational	15.4	18.6	16.7	15.5
College degree or postgraduate	44.7	30.2	32.9	13.4
<i>Total sum, by column</i>	100.0	100.0	100.0	100.0
Age (%)				
Younger than 35	22.0	34.6	23.8	36.9
35 to 54	32.5	38	48.5	41.1
55 to 61	11.5	11.0	11.2	7.0
62 and older	34.0	16.5	16.5	15.0
<i>Total sum, by column</i>	100.0	100.0	100.0	100.0
Race and Ethnicity (%)				
White, non-Hispanic	64.8	50.3	59.6	49.7
Black, non-Hispanic	10.8	17.5	12.4	19.6
Hispanic	14.2	25.7	13.7	19.5

Overdraft (OD) Fees (past year)	No OD Fees	1-3 Fees	3-10 Fees	More than 10 Fees
Other	8.9	5.0	12.2	5.3
<i>Total sum, by column</i>	100.0	100.0	100.0	100.0
Gender (%)				
Male	51.4	40.3	40.9	35.8
Female	48.6	59.7	59.1	64.2
<i>Total sum, by column</i>	100.0	100.0	100.0	100.0
Married or living with Partner (%)				
No	36.2	41.2	46.2	56.4
Yes	63.8	58.8	53.8	43.6
<i>Total sum, by column</i>	100.0	100.0	100.0	100.0
Household has Children (%)				
No Children	66.7	49.4	52.5	45.8
Has Children	33.3	50.6	47.5	54.2
<i>Total sum, by column</i>	100.0	100.0	100.0	100.0
Military Service (%)				
No military service	88.0	93.2	93.9	92.6
Some military service	12.0	6.8	6.1	7.4
<i>Total sum, by column</i>	100.0	100.0	100.0	100.0
Geographic Group (%)				
Urban	85.1	85.6	81.8	79.5
Some urban	10.1	8.7	14.3	16.0
Rural	4.7	5.8	3.9	4.5
<i>Total sum, by column</i>	100.0	100.0	100.0	100.0

B.2 Credit and debt characteristics

The tables and figures presented in this subsection of Appendix B parallel the tables and figures presented in the “Credit and Debt” section (**Section 5**) of the report, but presents this information for each of the four overdraft fee groups.

TABLE 12: CREDIT SCORE PROFILES BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR

Overdraft (OD) Fees (past year)	No OD Fees	1-3 OD Fees	4-10 OD Fees	More than 10 Fees
Credit Score				
Mean	742	668***	628**/+++	603**/+++
Median	767	673***	619***/+++	594***/+++
Credit Score Group (%)				
No Credit Score	8.3	10.1	7.2	0.9
Subprime	10.2	29.2	46.4	60.9
Near Prime	5.3	12.1	11.7	10.1
Prime	13.5	17.6	14.7	26.1
Super Prime	62.7	31.0	19.9	2.0

Notes: Credit scores are measured as of December 2022. The “**” and “+” signs in the top “credit score category” row indicate the level of statistical significance between the overdraft fee groups for the credit score category variable.

*/**/** differs significantly from “no OD fees” group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from “1-3 OD fees” group at the 0.10/0.05/0.01 level.

-/-/---- differs significantly from “4-10 OD fees” group at the 0.10/0.05/0.01 level.

FIGURE 22: AVERAGE CREDIT SCORE OVER TIME BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR

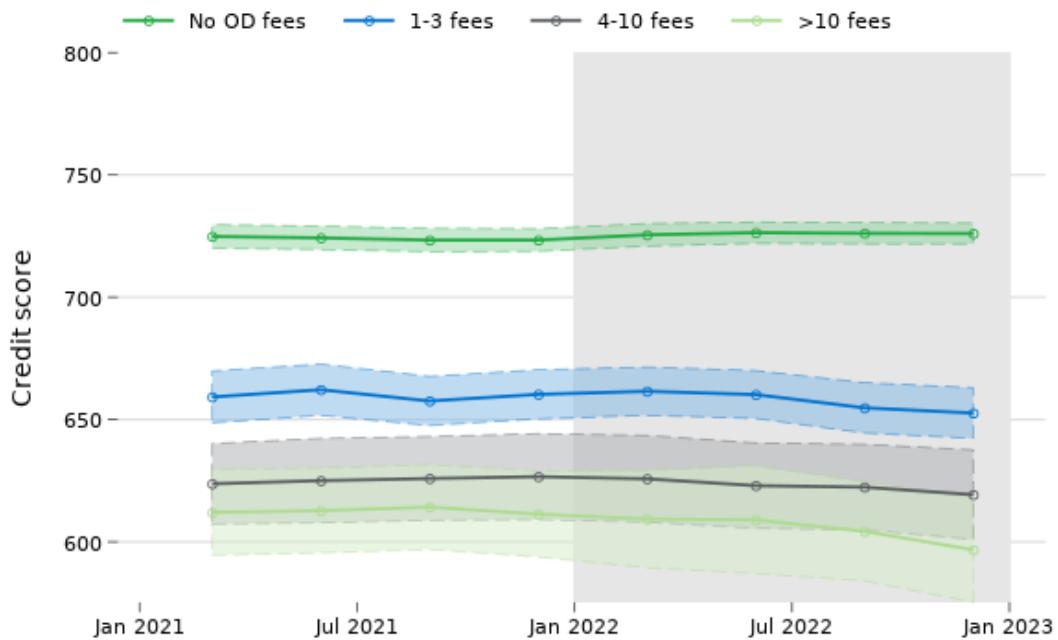


FIGURE 23: PERCENT OF CONSUMERS WITH A SUBPRIME CREDIT SCORE OVER TIME, BY NUMBER OF OVERDRAFT FEES

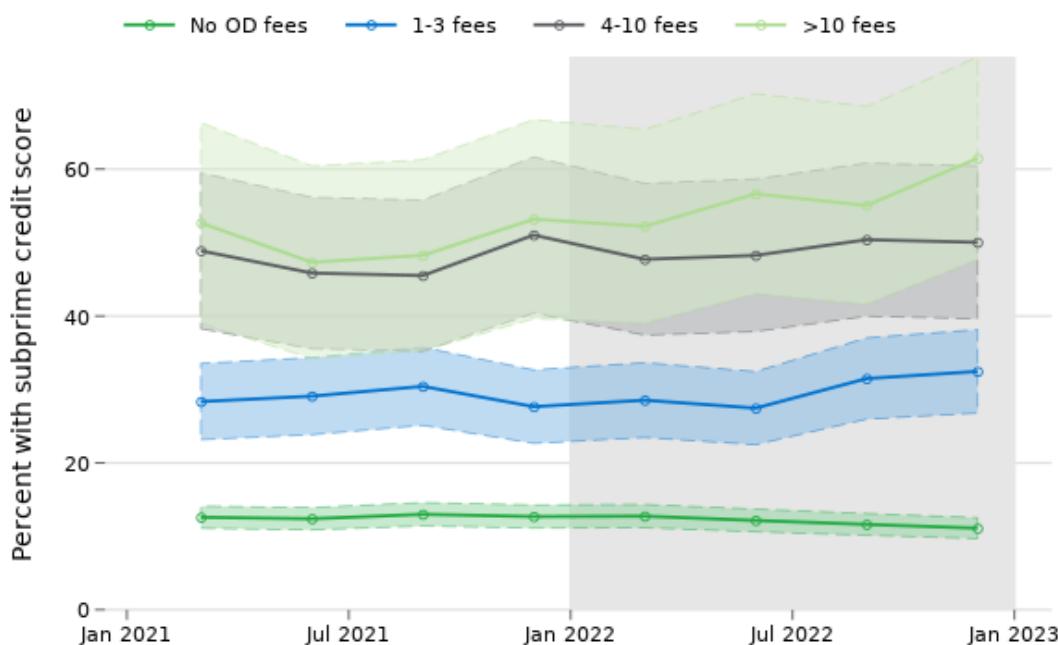


TABLE 13: CREDIT CARD OWNERSHIP AND CREDIT AVAILABILITY BY NUMBER OF OVERDRAFT FEES CHARGED IN THE PAST YEAR

Overdraft (OD) Fees (past year)	No OD Fees	1-3 OD Fees	3-10 OD Fees	More than 10 OD Fees
All Consumers				
Have a credit card (%)	83.8	76.8**	75.6*	70.6**
No credit available (%)	18.9	32.0***	37.5***	49.3***/++
Credit card holders				
No credit available (%)	3.3	11.4***	17.3***	28.1***/++/-
Credit available (\$)				
Median	22,289	4,367***	1,485***/++	766***/+++
Mean	33,331	16,963***	9,159***/+++	3,133***/++/-
Credit card limit (\$)				
Median	29,000	10,800***	7,000***/+	4,000***/+++
Mean	40,072	23,334***	15,795***/++	7,636***/++/-
Credit card balance (\$)				
Median	2,725	3,272	3,074	2,060
Mean	6,756	6,489	6,698	4,567
Credit card utilization (%)				
Median	10.7	43.8***	56.5***/++	88.2***/++/-
Mean	24.8	49.8***	61.2***/+	74.6***/++/-

*/**/*** differs significantly from "no OD fees" group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from "1-3 OD fees" group at the 0.10/0.05/0.01 level.

-/-/--- differs significantly from "4-10 OD fees" group at the 0.10/0.05/0.01 level.

FIGURE 24: PERCENT OF CONSUMERS WITH NO CREDIT AVAILABLE ON A CREDIT CARD OVER TIME, BY NUMBER OF OVERDRAFT FEES

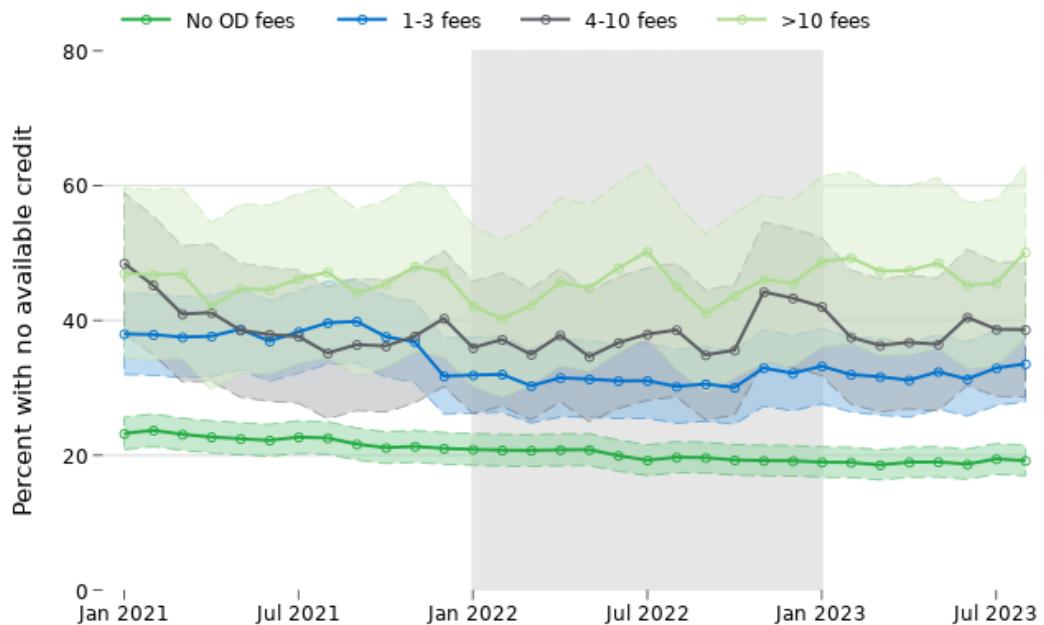


FIGURE 25: PERCENT OF CREDIT CARD HOLDERS WITH AN UNPAID BALANCE AFTER MAKING THE LAST PAYMENT, BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR

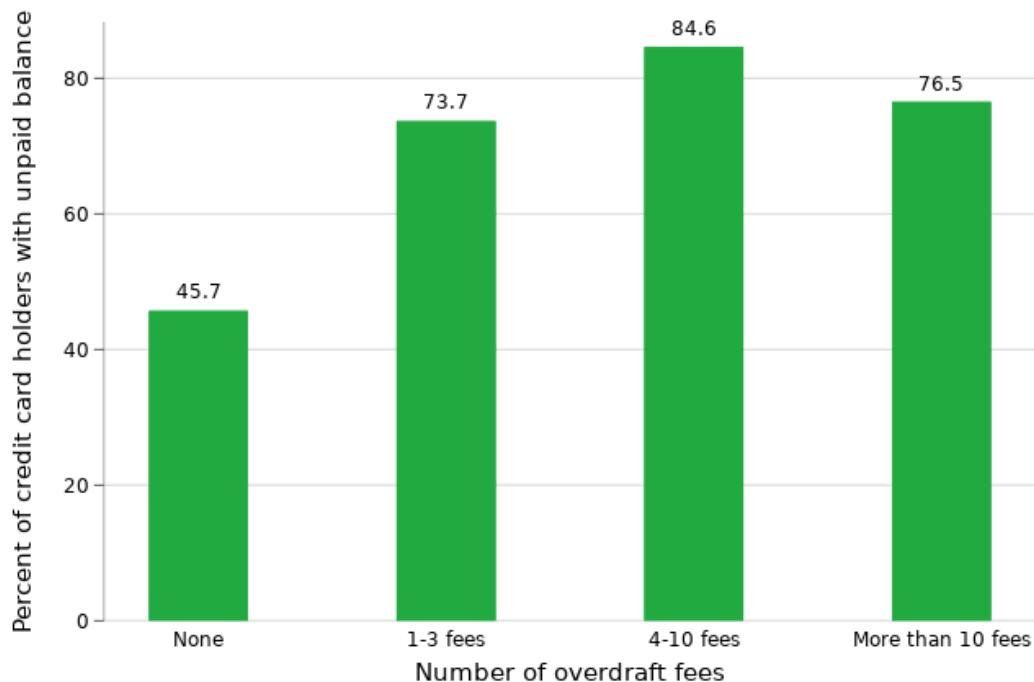


FIGURE 26: PERCENT OF CONSUMERS WITH A MORTGAGE, AUTO LOAN, AND STUDENT LOANS, BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR

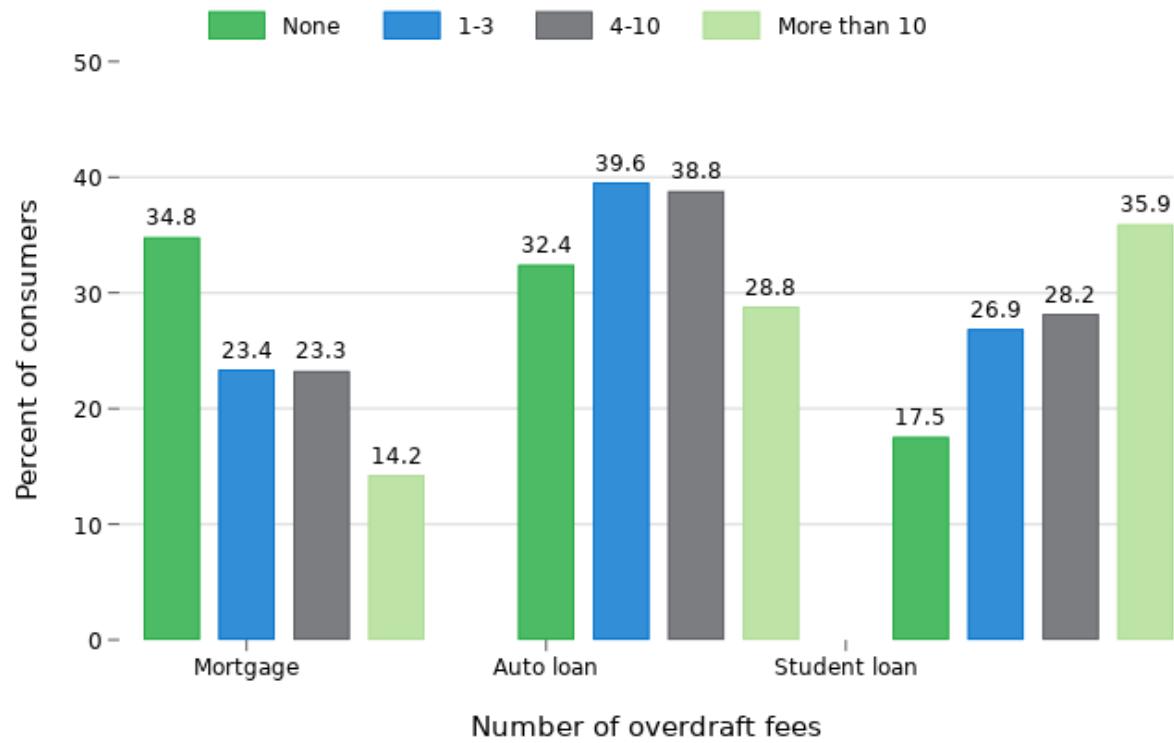


TABLE 14: PERCENT OF CONSUMERS IN EACH OVERDRAFT FEE GROUP AMONG CONSUMERS WITH AND WITHOUT A MORTGAGE, AUTO LOAN, AND STUDENT LOAN

Overdraft (OD) Fees (past year)	No OD Fees	1-3 OD Fees	3-10 OD Fees	More than 10 OD Fees
Mortgage (%)				
No Mortgage	73.1	16.6	6.2	4.1
Has a Mortgage	83.6	10.9	4.0	1.5
Auto Loan (%)				
No Auto Loan	77.9	13.5	5.1	3.5
Has an Auto Loan	73.5	17.4	6.4	2.8
Student Loan (%)				
No Student Loan	78.9	13.6	5.0	2.6
Has a Student Loan	66.7	19.8	7.8	5.8

Note: This table presents row percents

TABLE 15: CREDIT APPLICATIONS BY NUMBER OF OVERDRAFT FEES CHARGED IN THE PAST YEAR

Overdraft (OD) Fees (past year)	No OD Fees	1-3 OD Fees	3-10 OD Fees	More than 10 OD Fees
All Consumers				
Applied for Credit (%)	36.0	55.4***	68.0***/++	64.2***
Consumers who applied for credit				
Rejected or received less than expected	23.2	53.0***	73.5***/+++	79.9***/+++
Consumers who didn't apply for credit				
Didn't apply because expected denial	10.6	35.9***	48.9***/+++	48.8***/+++

*/**/*** differs significantly from "no OD fees" group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from "1-3 OD fees" group at the 0.10/0.05/0.01 level.

-/-/-/--- differs significantly from "4-10 OD fees" group at the 0.10/0.05/0.01 level.

FIGURE 27:PERCENT OF CONSUMERS WITH A PAYDAY, AUTO TITLE, OR PAWN LOAN BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR

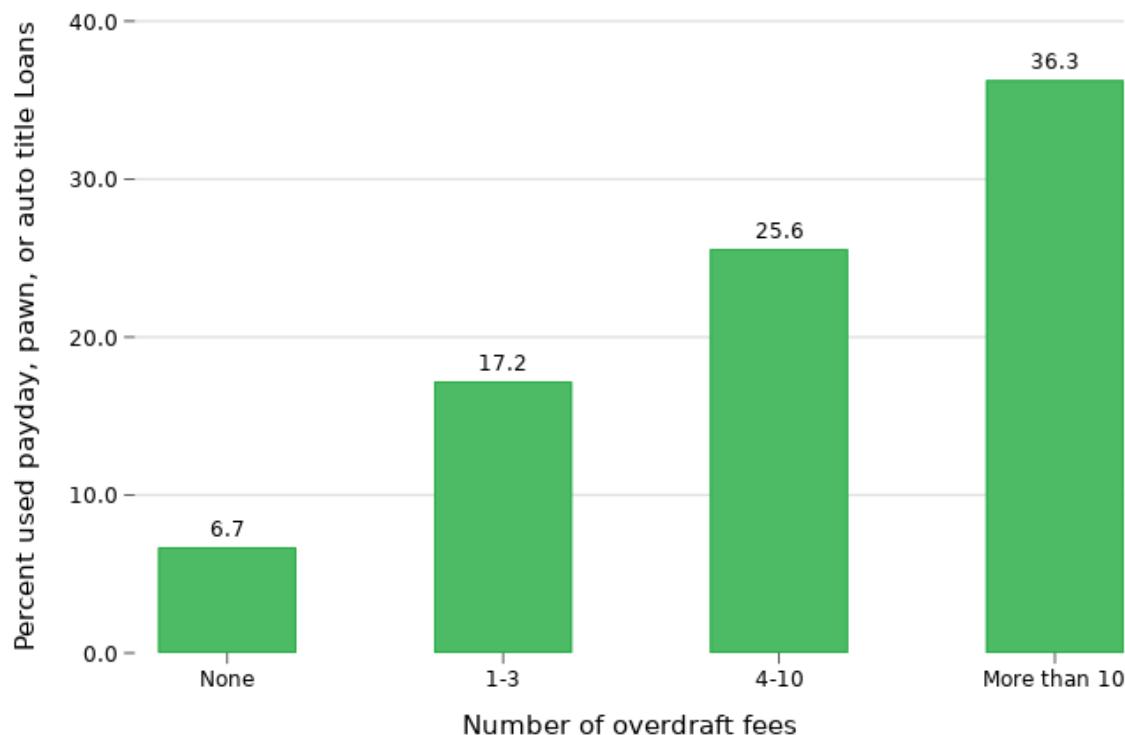


TABLE 16: PERCENT OF CONSUMERS WITH PAST DUE AND COLLECTIONS DEBT BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR

Overdraft (OD) Fees (past year)	No OD Fees	1-3 OD Fees	3-10 OD Fees	More than 10 OD Fees
Types of delinquent debt (%)				
Debt 60+ days past due	13.7	31.9***	46.8***/++	52.4***/++
Debt in collections (all third party)	14	31.6**	41.4***/+	40.1***
Non-medical debt in collections (third party)	9.2	20.7**	28.5***	32.7***/++

Notes: Debt information presented in this table is from February 2023.

*/**/*** differs significantly from "no OD fees" group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from "1-3 OD fees" group at the 0.10/0.05/0.01 level.

-/-/---- differs significantly from "4-10 OD fees" group at the 0.10/0.05/0.01 level.

FIGURE 28:PERCENT OF CONSUMERS WITH DEBT 60 OR MORE DAYS PAST DUE OVER TIME BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR

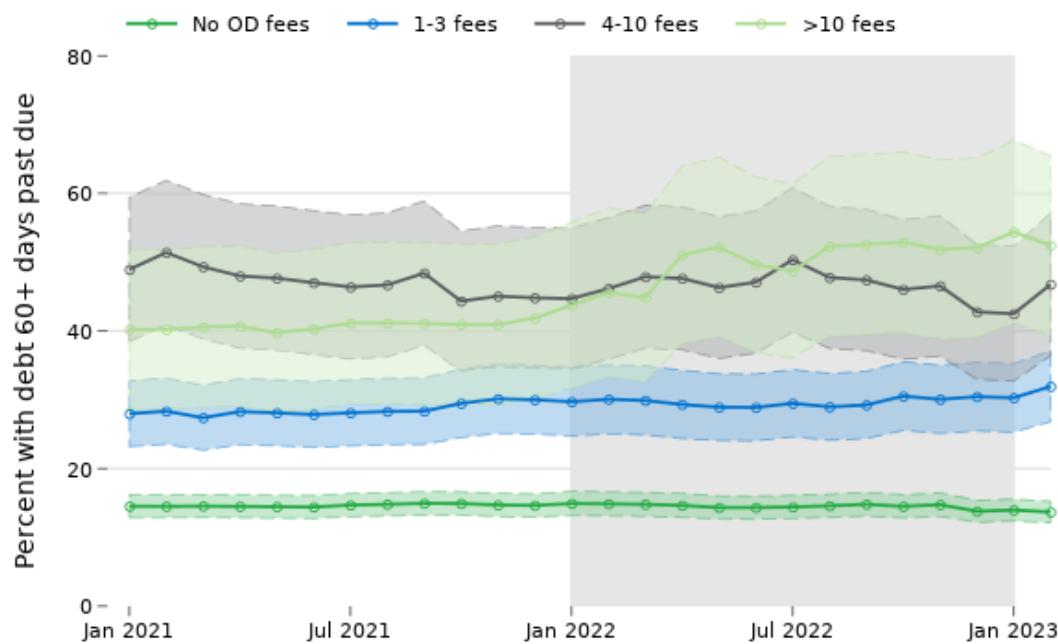
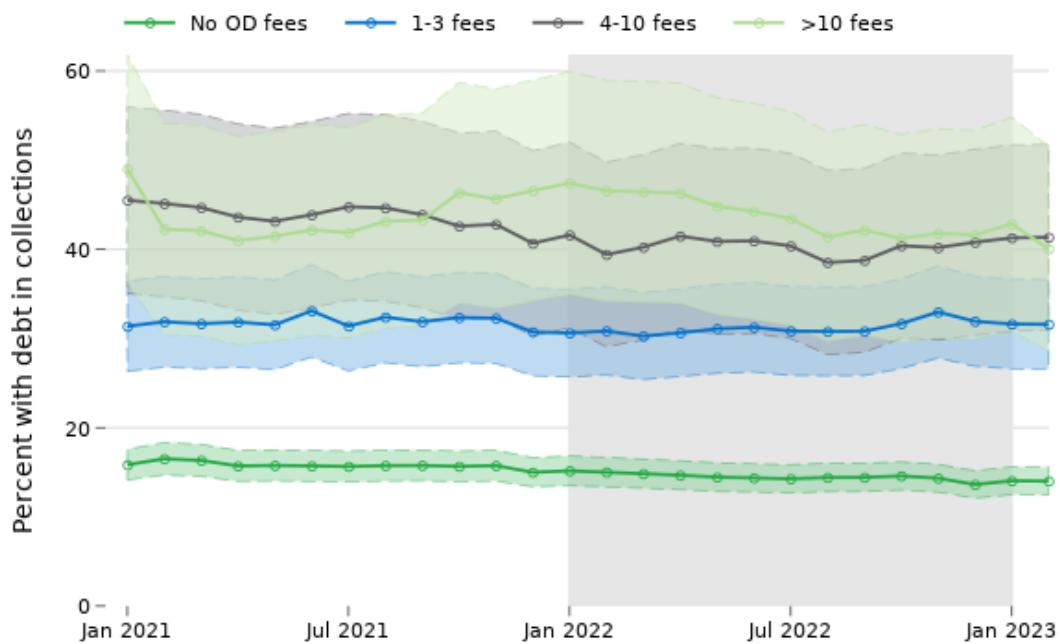


FIGURE 29: PERCENT OF CONSUMERS WITH DEBT IN COLLECTIONS OVER TIME BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR



B.3 Financial strain and well-being

The tables and figures presented in this subsection of Appendix B parallel the tables and figures presented in the “Financial strain and well-being” section (**Section 6**) of the report, but presents this information for each of the four overdraft fee groups.

TABLE 17: ACCOUNT OWNERSHIP, BALANCES, AND SAVING BEHAVIOR BY NUMBER OF OVERDRAFT FEES CHARGED IN THE PAST YEAR

Overdraft (OD) Fees (past year)	No Fees	1-3 OD Fees	3-10 OD Fees	More than 10 OD Fees
Have checking or savings account (%)	94.1	93.1	91.8	88.5
<i>Checking and savings balance (%)</i>		***	***	***/+++/-
Less than \$100	10.1	23.1	26.0	49.6
\$100-\$500	8.4	17.5	26.0	26.7
\$501-\$1,000	7.4	18.7	19.8	9.8
\$1,001-\$5,000	16.1	19.0	19.1	9.4
More than \$5,000	58.0	21.7	9.1	4.5
<i>Household current non-retirement saving habit (%)</i>		***	***/+++	***/++
Not saving now	28.6	45.7	68.2	67.2
Saving when possible	43.4	40.5	27.6	23.3
Saving regularly	28.0	13.8	4.2	9.4
<i>Retirement saving</i>				
Have retirement savings (%)	71.2	60.5***	49.8***/+	49.4***
Currently saving for retirement (%)	52.6	44.7**	36.0***	37.2**

Note: The “**” and “+” signs in the top “Checking and savings balance” and “Household current non-retirement saving habit” rows indicate the level of statistical significance for their respective variable.

*/**/*** differs significantly from “no OD fees” group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from “1-3 OD fees” group at the 0.10/0.05/0.01 level.

-/-/---- differs significantly from “4-10 OD fees” group at the 0.10/0.05/0.01 level.

FIGURE 31: HOUSEHOLD DIFFICULT PAYING BILLS, BY NUMBER OF OVERDRAFT FEES IN THE PAST YEAR

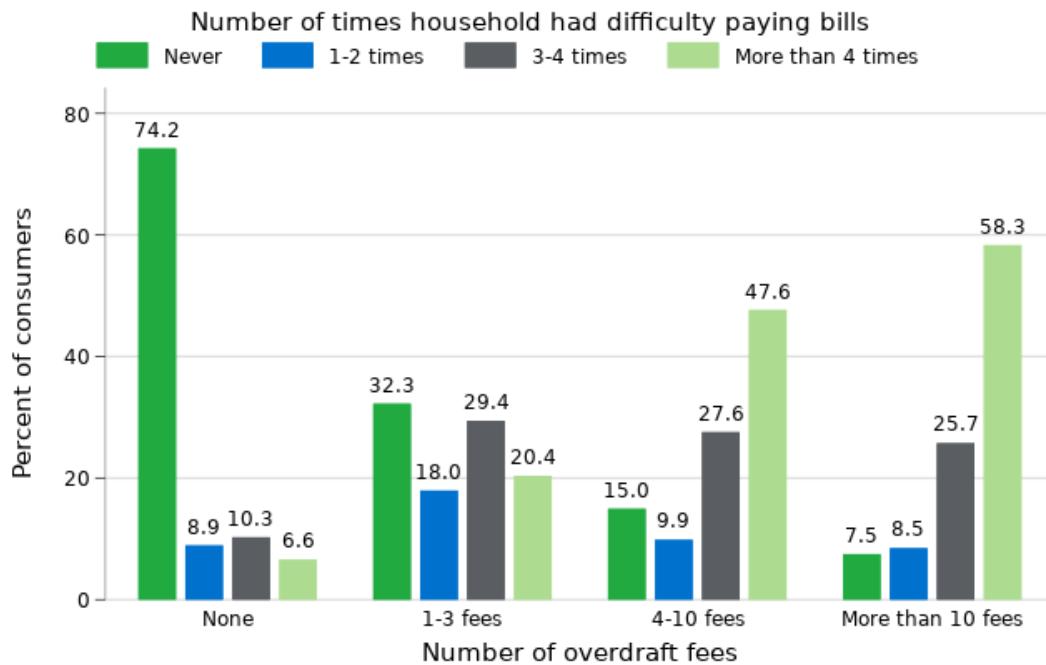


FIGURE 32: LENGTH OF TIME HOUSEHOLD COULD COVER EXPENSES IF LOST MAIN INCOME SOURCE, BY NUMBER OF OVERDRAFT FEES

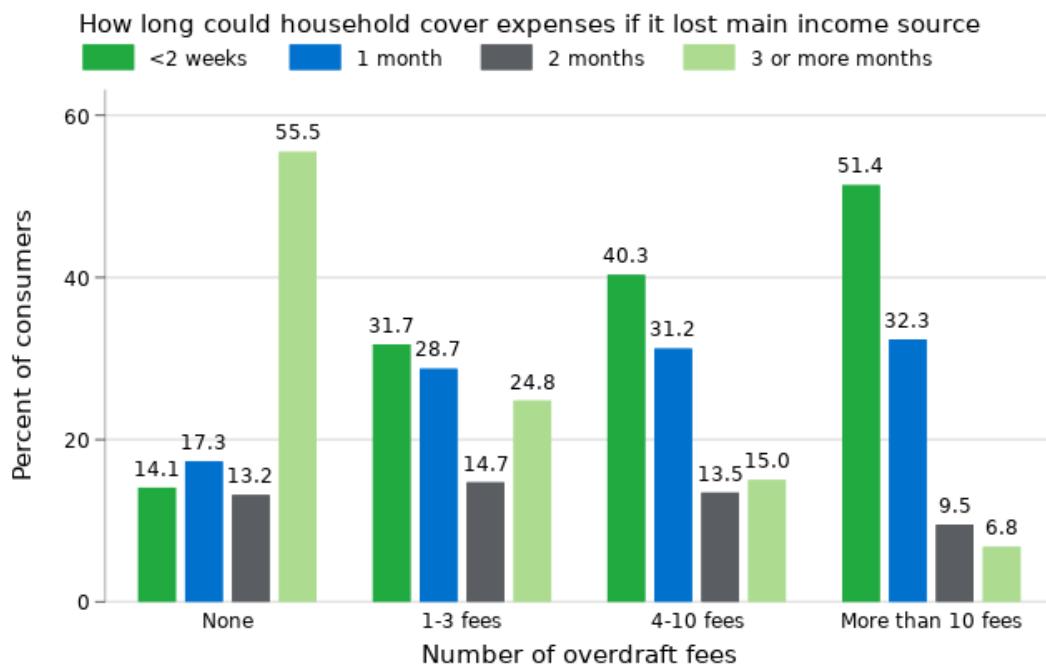
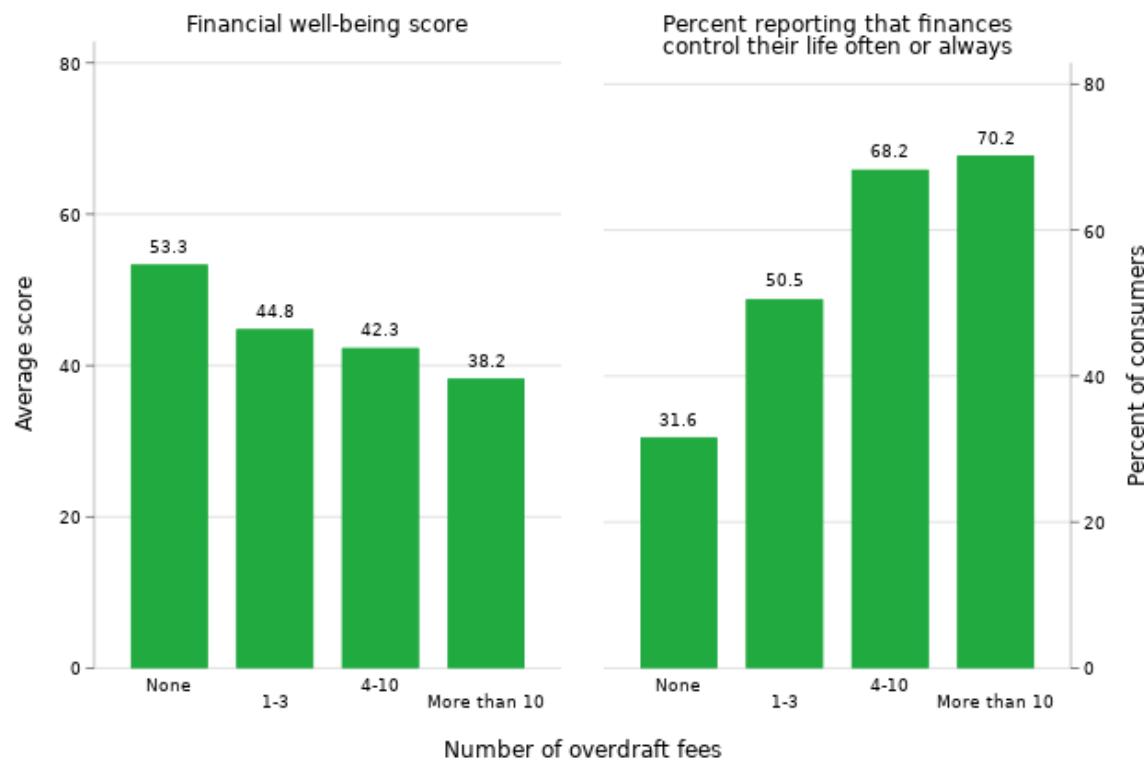


FIGURE 33: FINANCIAL WELLBEING AND THE PERCENT OF CONSUMERS REPORTING FINANCES CONTROL THEIR LIFE, BY NUMBER OF OVERDRAFT FEES



APPENDIX C: TABLES AND FIGURES FOR THE THREE NSF FEE GROUPS

C.1 Socio-economic and demographic characteristics

The two tables below present the socio-economic and demographic characteristics of consumers by the number of NSF fees in the past year. The first of these tables parallels the table in Section 4 of this report and presents the number of NSF fees by consumer socio-economic and demographic characteristics (row percentages), while the second table presents the socio-economic and demographic characteristics for each of the three NSF fee groups (column percents).

TABLE 18: NSF FEE GROUPS BY SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS

NSF Fees (past year)	No	Yes	1-3 NSF Fees	More than 3 NSF Fees
Household Income (\$)				
\$35,000 or less	72.5	27.5	19	8.5
\$35,001-\$65,000	72.6	27.4	19.7	7.7
\$65,001 - \$100,000	81.2	18.8	13.9	4.9
\$100,001-\$175,000	87.0	13.0	8.3	4.6
\$175,001 or more	96.4	3.6	3.3	0.3
Highest Level Education (%)				
High school or less	73.2	26.8	18.9	8.0
Some college but no degree	74.7	25.3	17.1	8.2
Two-year degree or vocational	76.5	23.5	17.2	6.3
College degree or postgraduate	88.2	11.8	8.3	3.5
Age (%)				
Younger than 35	75.7	24.3	16.8	7.5
35 to 54	75.7	24.3	16.4	7.9
55 to 61	79.8	20.2	17.4	2.8
62 and older	88.6	11.4	7.7	3.7
Race and Ethnicity (%)				
White, non-Hispanic	84.5	15.5	10.8	4.8
Black, non-Hispanic	69.6	30.4	23.5	6.9
Hispanic	70.4	29.6	20.1	9.5
Other	85.2	14.8	9.8	4.9
Gender (%)				
Male	85.0	15.0	10.1	4.9
Female	75.6	24.4	17.2	7.2

NSF Fees (past year)	No	NSF Fees Yes	1-3 NSF Fees	More than 3 NSF Fees
Married or living with Partner (%)				
No	75.5	24.5	16.5	8.0
Yes	82.8	17.2	12.6	4.7
Household has Children (%)				
No children	84.1	15.9	11.2	4.7
Has children	73.4	26.6	18.6	8.0
Military Service (%)				
No military service	79.4	20.6	14.4	6.2
Some military service	86.9	13.1	8.9	4.1
Geographic Group (%)				
Urban	80.4	19.6	14	5.6
Some Urban	78.9	21.1	12.7	8.3
Rural	76.1	23.9	15.3	8.6

TABLE 19: SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS BY NSF FEE GROUP

NSF Fees (past year)	No NSF Fees	1-3 NSF Fees	More than 3 NSF Fees
Household Income (%)			
\$35,000 or less	25.3	37.0	39.8
\$35,001-\$65,000	19.5	29.5	27.7
\$65,001 - \$100,000	20.7	19.7	16.8
\$100,001-\$175,000	21.1	11.3	15.0
\$175,001 or more	13.4	2.6	0.6
<i>Total sum, by column</i>	100.0	100.0	100.0
Highest Level Education (%)			
High school or less	22.1	32.8	32.4
Some college but no degree	17.6	23.1	26.2
Two-year degree or vocational	15.3	19.8	17.0
College degree or postgraduate	45.0	24.3	24.3
<i>Total sum, by column</i>	100.0	100.0	100.0
Age (%)			
Younger than 35	23.4	29.6	31.0
35 to 54	32.6	40.3	45.6
55 to 61	11.2	14.0	5.2
62 and older	32.7	16.1	18.2
<i>Total sum, by column</i>	100.0	100.0	100.0
Race and Ethnicity (%)			
White, non-Hispanic	65.5	47.4	49.9
Black, non-Hispanic	10.4	20.1	14.0
Hispanic	14.2	23.1	25.9

NSF Fees (past year)	No NSF Fees	1-3 NSF Fees	More than 3 NSF Fees
Other	8.9	5.8	7.0
<i>Total sum, by column</i>	100.0	100.0	100.0
Gender (%)			
Male	51.8	36.0	39.2
Female	48.2	64.0	60.8
<i>Total sum, by column</i>	100.0	100.0	100.0
Married or living with Partner (%)			
No	35.8	44.5	51.0
Yes	64.2	55.5	49.0
<i>Total sum, by column</i>	100.0	100.0	100.0
Household has Children (%)			
No Children	65.7	50.2	49.6
Has Children	34.3	49.8	50.4
<i>Total sum, by column</i>	100.0	100.0	100.0
Military Service (%)			
No military service	88.4	93.0	92.6
Some military service	11.6	7.0	7.4
<i>Total sum, by column</i>	100.0	100.0	100.0
Geographic Group (%)			
Urban	85.1	85.1	78.6
Some urban	10.3	9.6	14.4
Rural	4.6	5.3	6.9
<i>Total sum, by column</i>	100.0	100.0	100.0

C.2 Credit and debt characteristics

The tables and figures presented in this subsection of Appendix B parallel the tables and figures presented in the “Credit and Debt” section (**Section 5**) of the report, but presents this information for each of the three NSF fee groups.

TABLE 20: CREDIT SCORE PROFILES BY NUMBER OF NSF FEES IN THE PAST YEAR

NSF Fees (past year)	No NSF Fees	1-3 NSF Fees	More than 3 NSF Fees
Credit Score			
Mean	739	661***	602***/+++
Median	764	658***/+++	595***/+++
Credit Score Group (%)			
No Credit Score	7.6	12.4	8.2
Subprime	11.3	30.6	55.1
Near Prime	5.2	13.5	10.9
Prime	13.9	17.4	17.6
Super Prime	61.9	26.1	8.2

Notes: Credit scores are measured as of December 2022. The “**” and “+” signs in the top “credit score category” row indicate the level of statistical significance between the NSF fee groups for the credit score category variable.

*/**/*** differs significantly from 'No NSF Fees' group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from 1-3 NSF Fees' group at the 0.10/0.05/0.01 level.

FIGURE 34: AVERAGE CREDIT SCORE OVER TIME BY NUMBER OF NSF FEES IN THE PAST YEAR

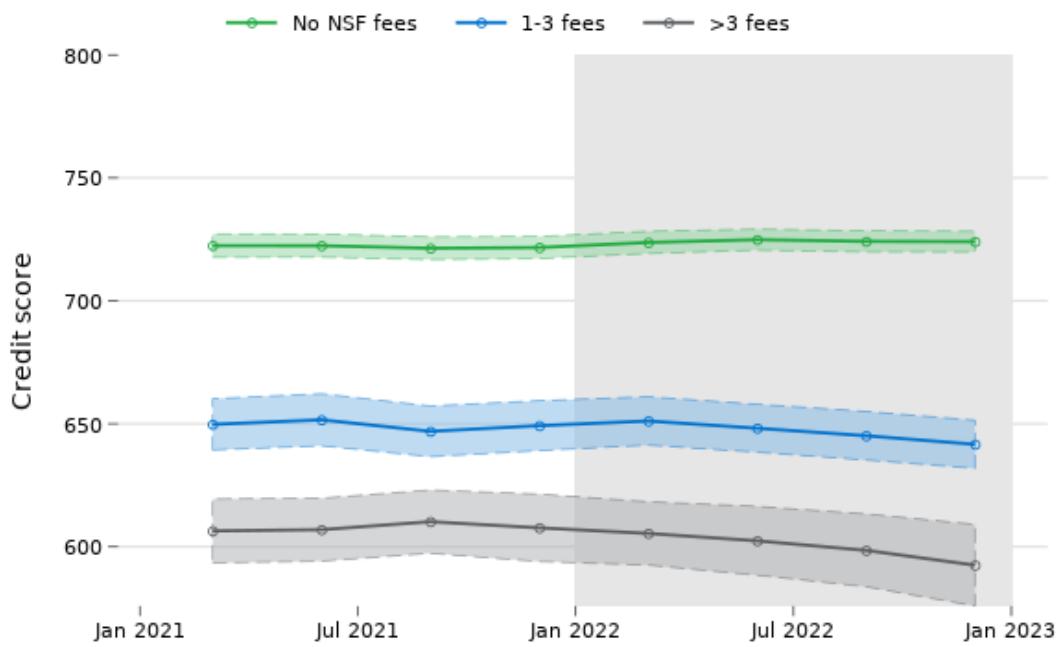


FIGURE 35: PERCENT OF CONSUMERS WITH A SUBPRIME CREDIT SCORE OVER TIME, BY NUMBER OF NSF FEES

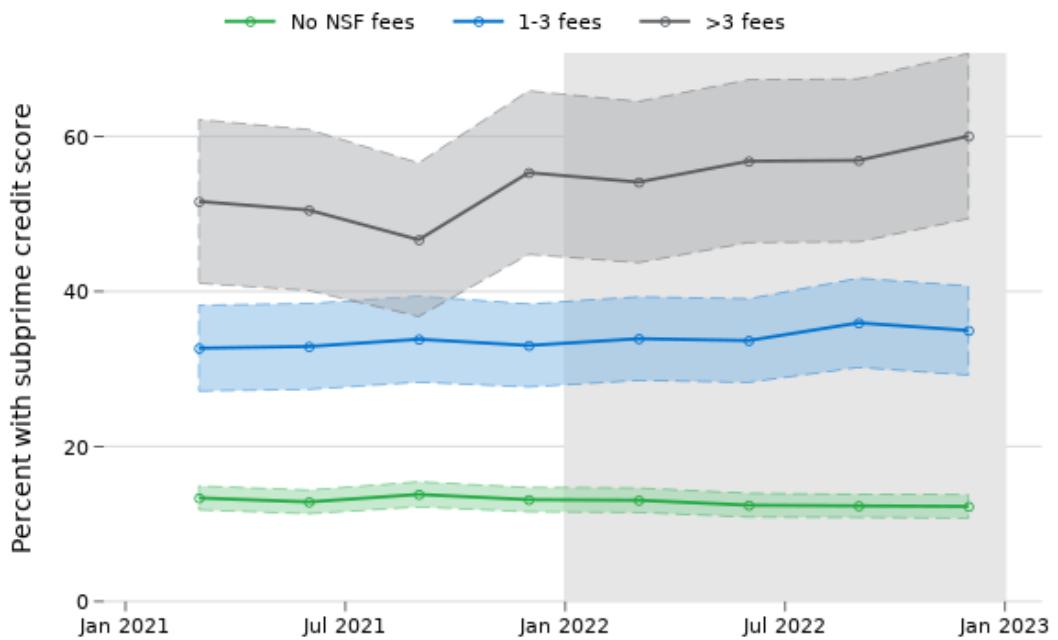


TABLE 21: CREDIT CARD OWNERSHIP AND CREDIT AVAILABILITY BY NUMBER OF NSF FEES CHARGED IN THE PAST YEAR

NSF Fees (past year)	No NSF Fees	1-3 NSF Fees	More than 3 NSF Fees
All Consumers			
Have a credit card (%)	84.3	73.7***	68.9***
No credit available (%)	18.6	36.5***	48.1***/+
Credit card holders			
No credit available (%)	3.5	13.8***	24.6***/++
Credit available (\$)			
Median	21,257	2,389***	456***/+
Mean	32,702	14,147***	4,014***/+++
Credit card limit (\$)			
Median	27,700	9,550**	5,450***/+
Mean	39,370	21,064***	9,348***/+++
Credit card balance (\$)			
Median	2,725	3,367	2,119
Mean	6,697	6,966	5,399
Credit card utilization (%)			
Median	11.1	56.7***	88.2***/+++
Mean	25.3	55.7***	72.5***/+++

*/**/*** differs significantly from 'No NSF Fees' group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from 1-3 NSF Fees' group at the 0.10/0.05/0.01 level.

FIGURE 36: PERCENT OF CONSUMERS WITH NO CREDIT AVAILABLE ON A CREDIT CARD OVER TIME, BY NUMBER OF NSF FEES

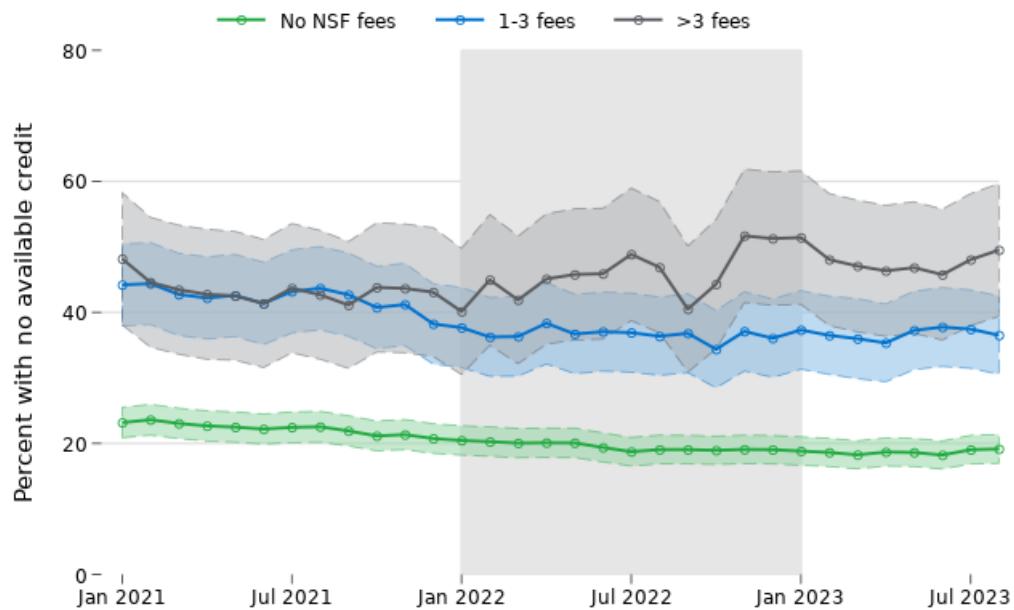


FIGURE 37: PERCENT OF CREDIT CARD HOLDERS WITH AN UNPAID BALANCE AFTER MAKING THE LAST PAYMENT, BY NUMBER OF NSF FEES IN THE PAST YEAR

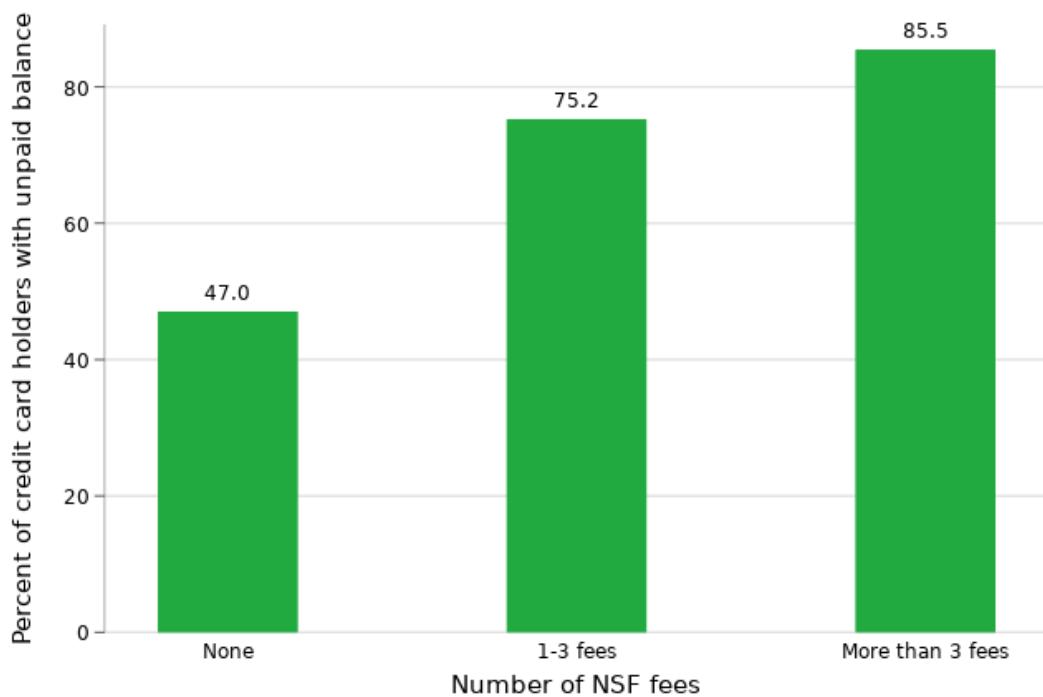


FIGURE 38: PERCENT OF CONSUMERS WITH A MORTGAGE, AUTO LOAN, AND STUDENT LOANS, BY NUMBER OF NSF FEES IN THE PAST YEAR



TABLE 22: PERCENT OF CONSUMERS IN EACH NSF FEE GROUP AMONG CONSUMERS WITH AND WITHOUT A MORTGAGE, AUTO LOAN, AND STUDENT LOAN

NSF Fees (past year)	No NSF Fees	Occasional NSF Fees	Frequent NSF Fees
Mortgage (%)			
No Mortgage	76.5	16.2	7.3
Has a Mortgage	87.5	9.5	3.0
Auto Loan (%)			
No Auto Loan	81.4	12.7	5.9
Has an Auto Loan	77.3	16.7	6
Student Loan (%)			
No Student Loan	82.0	13.0	5.0
Has a Student Loan	72.2	18.3	9.4

Note: This table presents row percents

TABLE 23: CREDIT APPLICATIONS BY NUMBER OF NSF FEES CHARGED IN THE PAST YEAR

NSF Fees (past year)	No NSF Fees	1-3 NSF Fees	More than 3 NSF Fees
All Consumers			
Applied for Credit (%)	37.7	54.3***	67.9****/++
Consumers who applied for credit			
Rejected or received less than expected	24.4	59.3***	83.9***
Consumers who didn't apply for credit			
Didn't apply because expected denial	11.2	36.0***	56.2****/+++

*/**/*** differs significantly from 'No NSF Fees' group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from 1-3 NSF Fees' group at the 0.10/0.05/0.01 level.

TABLE 24: PERCENT OF CONSUMERS WITH PAST DUE AND COLLECTIONS DEBT BY NUMBER OF NSF FEES IN THE PAST YEAR

NSF Fees (past year)	No NSF Fees	1-3 NSF Fees	More than 3 NSF Fees
Types of delinquent debt (%)			
Debt 60+ days past due	14.4	33.8***	52.9****/+++
Debt in collections (all third party)	14.3	32.1***	51.5****/+++
Non-medical debt in collections (third party)	9.4	19.9****/+++	40.4****/+++

Notes: Debt information presented in this table is from February 2023.

*/**/*** differs significantly from 'No NSF Fees' group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from 1-3 NSF Fees' group at the 0.10/0.05/0.01 level

FIGURE 39: PERCENT OF CONSUMERS WITH A PAYDAY, AUTO TITLE, OR PAWN LOAN BY NUMBER OF NSF FEES IN THE PAST YEAR



FIGURE 40: PERCENT OF CONSUMERS WITH DEBT 60 OR MORE DAYS PAST DUE OVER TIME BY NUMBER OF NSF FEES IN THE PAST YEAR

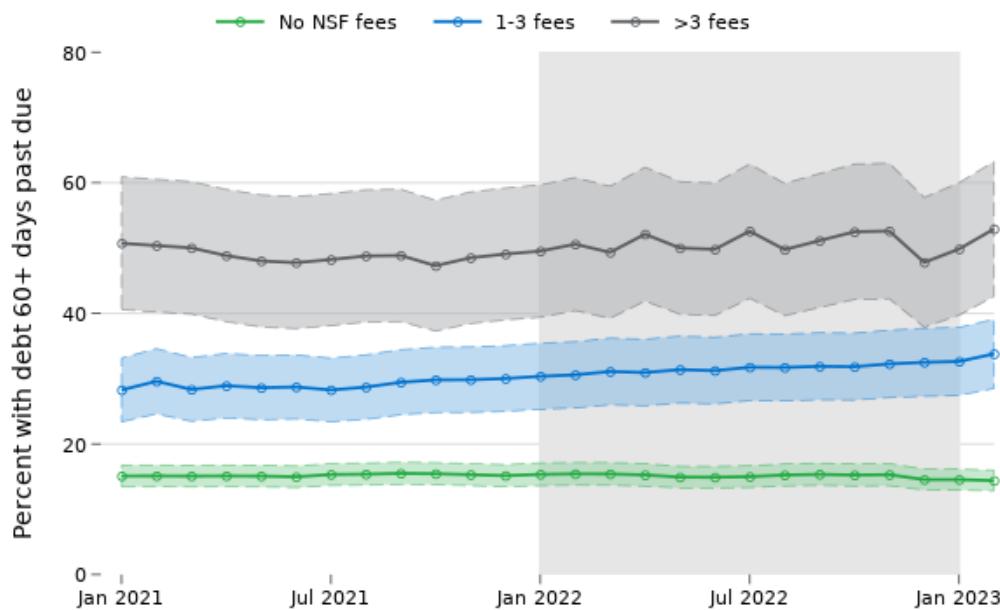
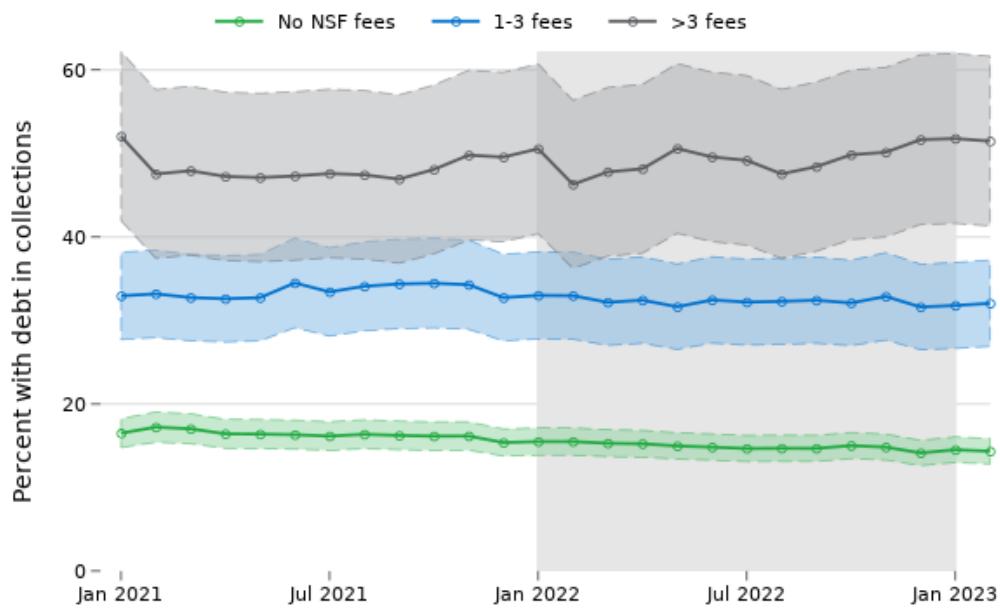


FIGURE 41: PERCENT OF CONSUMERS WITH DEBT IN COLLECTIONS OVER TIME BY NUMBER OF NSF FEES IN THE PAST YEAR



C.3 Financial strain and well-being

TABLE 25: ACCOUNT OWNERSHIP, BALANCES, AND SAVING BEHAVIOR BY NUMBER OF OVERDRAFT AND NSF FEES CHARGED IN THE PAST YEAR

NSF Fees (past year)	No NSF Fees	1-3 NSF Fees	More than 3 NSF Fees
Have checking or savings account (%)	94.3	91.9	90.3
<i>Checking and savings balance (%)</i>		***	**/++
Less than \$100	10.4	25.7	36.1
\$100-\$500	8.1	21.9	30.2
\$501-\$1,000	7.9	16.9	19.8
\$1,001-\$5,000	16.2	22.3	8.7
More than \$5,000	57.4	13.2	5.1
<i>Household current non-retirement saving habit (%)</i>		***	***/+++
Not saving now	28.5	51.6	73.3
Saving when possible	43.5	38.9	21.0
Saving regularly	28.0	9.5	5.7
<i>Retirement saving</i>			
Have retirement savings (%)	71.8	54.9**	43.3**/+
Currently saving for retirement (%)	53.6	38.7**	31.5**

Note: The “**” and “+” signs in the top “Checking and savings balance” and “Household current non-retirement saving habit” rows indicate the level of statistical significance for their respective variable.

*/**/** differs significantly from 'No NSF Fees' group at the 0.10/0.05/0.01 level.

+/++/+++ differs significantly from 1-3 NSF Fees' group at the 0.10/0.05/0.01 level.

FIGURE 42: HOUSEHOLD DIFFICULT PAYING BILLS, BY NUMBER OF NSF FEES IN THE PAST YEAR

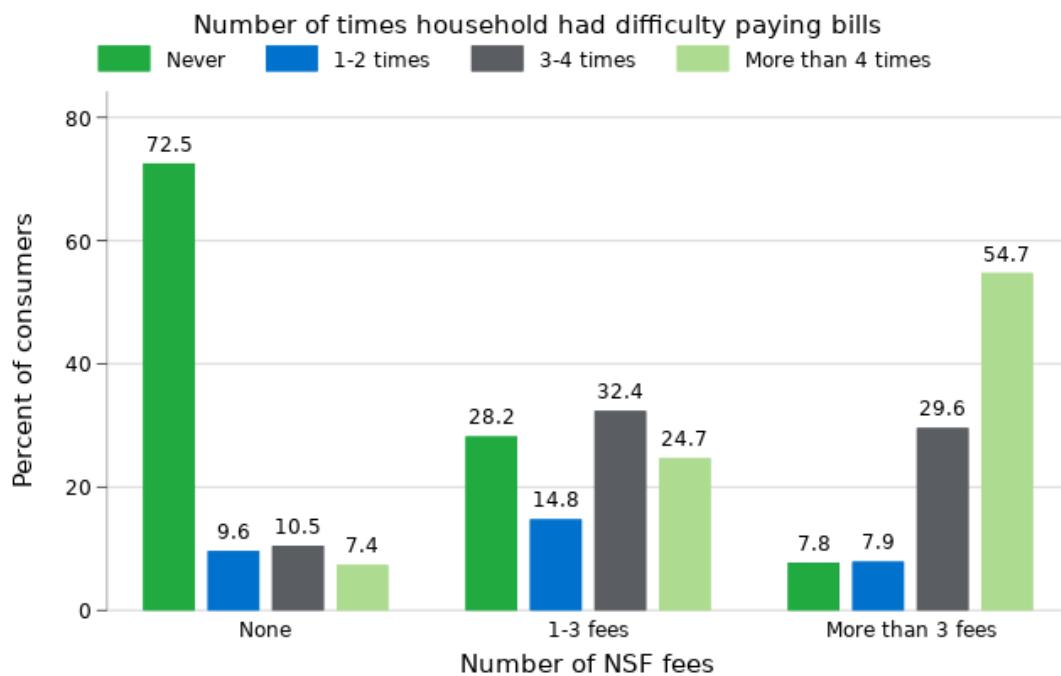


FIGURE 43: LENGTH OF TIME HOUSEHOLD COULD COVER EXPENSES IF LOST MAIN INCOME SOURCE, BY NUMBER OF NSF FEES IN THE PAST YEAR

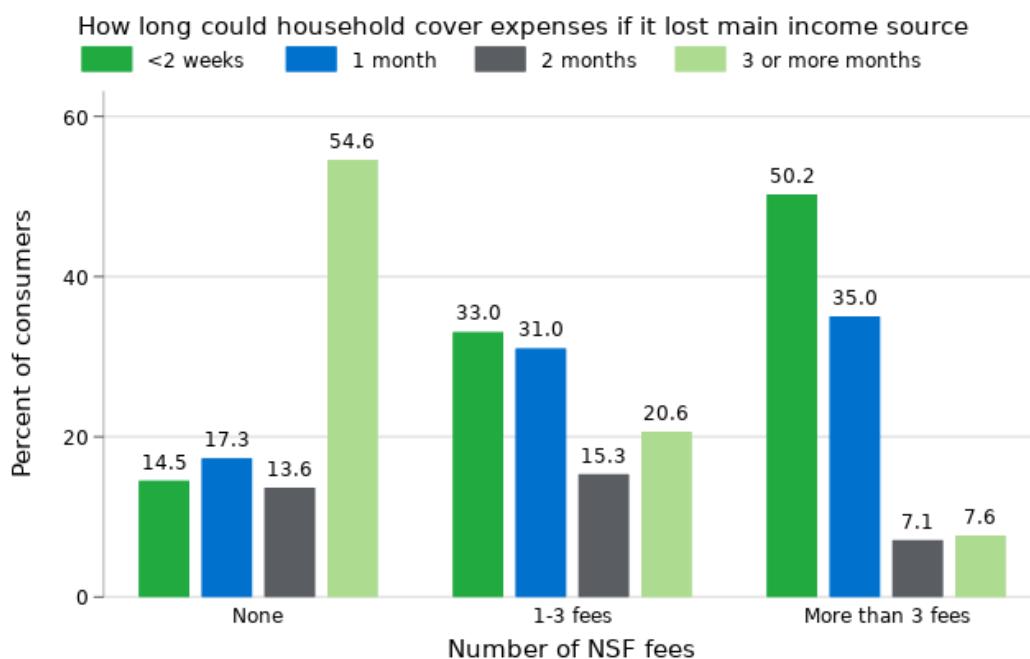
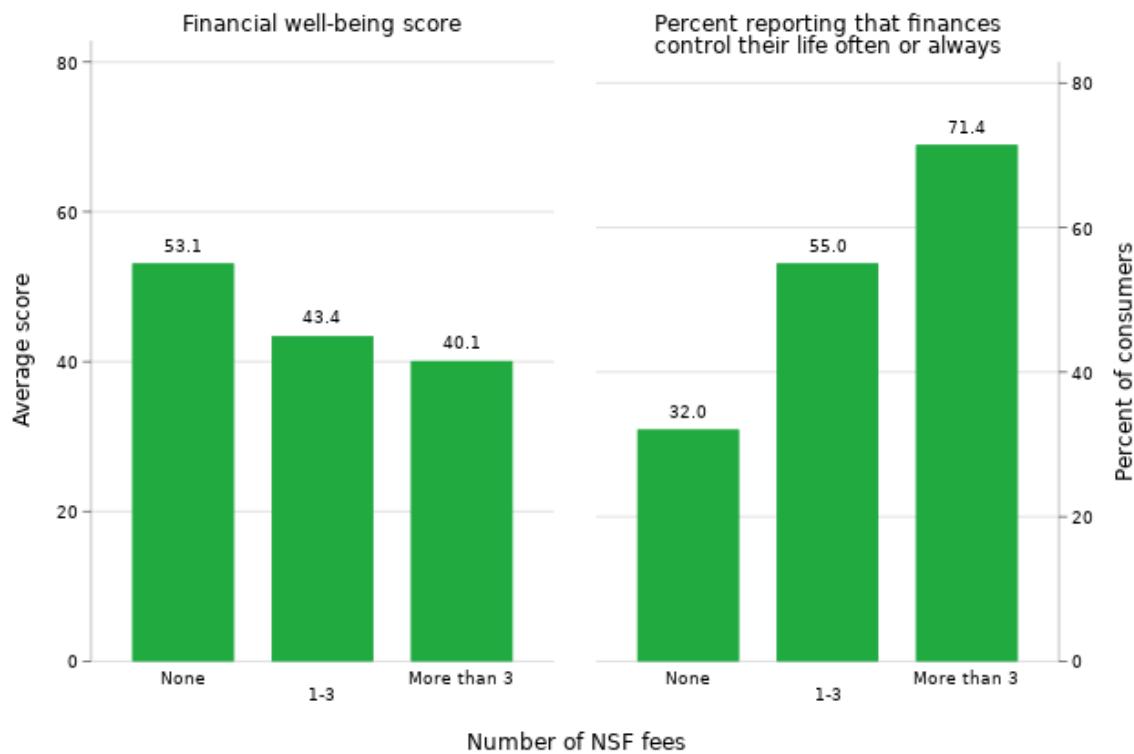


FIGURE 44: FINANCIAL WELLBEING AND THE PERCENT OF CONSUMERS REPORTING FINANCES CONTROL THEIR LIFE, BY NUMBER OF NSF FEES IN THE PAST YEAR



APPENDIX D: CHARACTERISTICS OF FULL MAKING ENDS MEET SAMPLE

D.1 Socio-economic and demographic characteristics

TABLE 26: SOCIO-ECONOMIC AND DEMOGRAPHIC CHARACTERISTICS, FULL MEM SAMPLE

	Full Sample
Household Income (\$)	
\$35,000 or less	28.4
\$35,001-\$65,000	21.5
\$65,001 - \$100,000	20.1
\$100,001-\$175,000	19.2
\$175,001 or more	10.8
Highest Level of Education (%)	
High school or less	24.4
Some college but no degree	18.9
Two-year degree or vocational	16.0
College degree or postgraduate	40.7
Age (%)	
Younger than 35	24.4
35 to 54	34.1
55 to 61	11.3
62 and older	30.1
Race and Ethnicity (%)	
White, non-Hispanic	61.2
Black	11.9
Hispanic	16.8
Other	10.1
Gender (%)	
Male	49.0
Female	51.0
Married or Living with Partner (%)	
No	39.4
Yes	60.6
Household has Children (%)	
No children	62.7
Has children	37.3
Military Service (%)	
No military service	89.3

	Full Sample
Some military service	10.7
Geographic Group (%)	
Urban	84.6
Some Urban	10.5
Rural	4.9

D.2 Credit and debt characteristics

TABLE 27: CREDIT SCORE AND CREDIT CARD CHARACTERISTICS, FULL MEM SAMPLE

Credit characteristics	Full Sample
Credit Score	
Mean	720
Median	745
Credit Score Group (%)	
No Credit Score	8.4
Subprime	16.6
Near Prime	6.8
Prime	14.6
Super Prime	53.6
Credit cards	
<i>All Consumers</i>	
Have a credit card (%)	81.6
No credit available (%)	23.1
<i>Credit card holders</i>	
No credit available (%)	5.8
Credit available (\$)	
Median	15,826
Mean	28,892
Credit card limit (\$)	
Median	23,000
Mean	35,439
Credit card balance (\$)	
Median	2,834
Mean	6,581
Credit card utilization (%)	
Median	14.4
Mean	31.3
Unpaid balance after making the last payment (%)	52.5

Notes: Credit scores are measured as of December 2022. Credit card information is measured as of February 2023, with the exception of “unpaid balance [on a credit card] after making the last payment,” which is from the MEM survey and measured as of survey completion (January to April 2023).

TABLE 28: DEBT AND CREDIT APPLICATIONS AND USE, FULL MEM SAMPLE

Full Sample	
Types of debt/loans held (%)	
Mortgage	31.7
Auto loan	33.6
Student loan	19.8
Credit applications in the past year	
<i>All Consumers</i>	
Applied for credit (%)	41.5
<i>Consumers who applied for credit</i>	
Rejected or received less than expected	36.6
<i>Consumers who didn't apply for credit</i>	
Didn't apply because expected denial	15.3
Types of delinquent debt (%)	
Debt 60+ days past due	19.3
Debt in collections (all third party)	19.0
Non-medical debt in collections (third party)	12.6
Use payday, auto title, or pawn loan in the past year (%)	
	10.2

Notes: Types of debt and types of delinquent debt are measured as of February 2023. Credit applications and use of payday auto title, and pawn loans in the past year are from the MEM survey and measured as of survey completion (January to April 2023).

D.3 Financial strain and well-being

TABLE 29: ACCOUNT OWNERSHIP, BALANCES, AND SAVING BEHAVIOR, FULL MEM SAMPLE

	Full sample
Have checking or savings account (%)	93.6
<i>Checking and savings balance (%)</i>	
Less than \$100	14.1
\$100-\$500	11.3
\$501-\$1,000	9.7
\$1,001-\$5,000	16.8
More than \$5,000	48.0
<i>Household current non-retirement saving habit (%)</i>	
Not saving now	34.5
Saving when possible	41.4
Saving regularly	24.1
<i>Retirement saving</i>	
Have retirement savings (%)	67.7
Currently saving for retirement (%)	49.8

Note: All information is from the MEM survey and measured as of survey completion (January to April 2023).

TABLE 30: FINANCIAL STRAIN AND WELL-BEING, FULL MEM SAMPLE

	Full sample
<i>Number of times trouble paying bill in the past year (%)</i>	
0 times	62.6
1-2 times	10.3
3-4 times	14.5
More than 4 times	12.5
<i>Length of time household could cover expenses if lost main income source</i>	
Less than 2 weeks	19.5
About 1 month	20.4
About 2 months	13.2
3 or more months	46.9
<i>Financial well-being</i>	
Average financial well-being score	51.0
Report that finances control their life (%)	8.7

Note: All information is from the MEM survey and measured as of survey completion (January to April 2023).