CONSUMER FINANCIAL PROTECTION BUREAU | JANUARY 2025

Consumer Use of Buy Now, Pay Later and Other Unsecured Debt

Consumer Financial Protection Bureau

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I. Executive Summary

Buy Now, Pay Later (BNPL) loans, generally defined as zero-interest loans repaid in four or fewer installments ("pay-in-four" loans), have grown rapidly in the United States (U.S.) since 2019. Lenders have typically not reported BNPL loans to the nationwide consumer reporting companies. As a result, the loans have not appeared in credit records in large enough volumes for external observers to measure key statistics relevant to consumers in this market, including overall persistence in use, loan stacking across firms and total unsecured consumer debt balances. This study overcomes this data gap by using a matched sample of BNPL applications and originations for pay-in-four loans from six large BNPL firms (Affirm, Afterpay, Klarna, PayPal, Sezzle, and Zip) with their corresponding de-identified credit records.

Based on these data from the six firms listed above, the analysis found that:

- **Twenty-one percent of consumers with a credit record financed at least one purchase using BNPL from at least one of the six firms in 2022.** Approximately 20 percent of these borrowers can be characterized as heavy users, originating more than one BNPL loan on average per month in 2022, up from 18 percent in 2021.

- **In 2022, consumers took out more BNPL loans on average than in 2021, with the majority taking out multiple BNPL loans at the same time.** The average number of annual originations per borrower increased from 8.5 in 2021 to 9.5 in 2022. In 2022, approximately 63 percent of borrowers originated multiple simultaneous loans at some point during the year, and 33 percent did so across multiple firms. The majority of BNPL loans originated during this time period did not appear in credit records.

- **From 2020-2022, credit approval rates for BNPL loans increased, in part due to the increased use of counteroffers.** In some instances, rather than declining the application outright, BNPL lenders have begun making applicants a counteroffer. Counteroffers may include, for example, a downpayment above the typical 25 percent, or a lower amount of credit offered. Across all credit score categories, including consumers without a FICO score, the six lenders approved an average 67 percent of applications in 2020, 78 percent in 2021 and 79 percent in 2022. Among applicants with subprime or deep subprime credit scores, BNPL lenders approved 78 percent (including counteroffers) in 2022.

- **Borrowers with subprime or deep subprime credit scores make up the majority of BNPL originations.** From 2021 to 2022, borrowers with deep subprime credit scores accounted for 45% of BNPL originations, while those with subprime credit scores were responsible for another 16% of originations.

- **BNPL default rates remain lower than credit cards, likely due to automatic repayment requirements**. On average, between 2019-2022, BNPL borrowers defaulted on 2 percent of their BNPL loans**.** In comparison, BNPL borrowers defaulted on 10 percent of the credit cards they held during the same time period. Differences in default rates between BNPL and credit cards may be the result of structural differences in how repayments are set up with the two different products. For example, most BNPL firms require customers to set up automatic repayments via their debit card, credit card, or checking account.

- **Consumers with at least one BNPL loan in a given month were more likely to hold higher balances on other types of unsecured consumer credit.** Those consumers held higher balances in personal loans ($453 more), retail loans ($292 more), student loans ($5,734 more), credit cards ($871 more), and loans from subprime alternative financial services lenders ($29 more) compared to consumers of the same age and credit score category who did not use BNPL. These differences are statistically significant at a 99 percent level of confidence.

- **Compared to older age groups, BNPL purchases of borrowers aged 18-24 composed a higher percent of their total unsecured debt in the months in which they borrowed in 2022.** Among this age group, BNPL purchases made up 28 percent of total unsecured consumer debt, compared to an average of 17 percent among borrowers of all age groups, during the months in which they borrowed.

- **Prior to first-time BNPL use, average credit card utilization rates increased, suggesting that lower credit card liquidity may encourage consumers to finance purchases with BNPL.** In addition to the trend in the credit card utilization rate, the average utilization rate among BNPL borrowers remains notably high, between 60 and 66 percent. In contrast, the average credit card utilization rate for consumers never observed using BNPL was 34 percent.

II. Introduction

Buy Now, Pay Later (BNPL) loans, generally defined as zero-interest loans repaid in four or fewer installments ("pay-in-four" loans), have grown rapidly in the United States (U.S.) since 2019.[1] Because BNPL lenders generally do not furnish loan performance information to the three Nationwide Consumer Reporting Companies (NCRC),[2] it has not been possible to use administrative records to estimate BNPL prevalence, persistence in use, and loan stacking across firms (defined as having two or more concurrent outstanding BNPL loans at different lenders). This study fills that gap.

Several surveys have attempted to identify the share of U.S. consumers that borrowed with BNPL loans within the previous year, spanning a wide range of estimates.[3] Many of these

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* This report was authored by Cortnie Shupe and Joshua DeLuca (CFPB Office of Research).

[1] For a thorough description of the pay-in-four product and market trends from 2019-2021, *See* Martin Kleinbard, Jack Sollows and Laura Udis, "Buy Now, Pay Later: Market Trends and Consumer Impacts," Consumer Financial Protection Bureau, September 2022, *available at* https://files.consumerfinance.gov/f/documents/cfpb_buy-now-pay-later-market-trends-consumer-impacts_report_2022-09.pdf, hereinafter Kleinbard et al. 2022 (last visited December 3, 2024). The pay-in-four product typically requires a 25 percent downpayment, with the following three payments equally divided into three installments every two weeks. The loan amount is equal to 75 percent of the purchase, with the last payment due six weeks from the purchase date. Downpayment and installment amounts may vary, for example, in the event of an application approval that follows a counteroffer from the lender. We discuss these in detail in Section IV.

[2] These companies include Equifax, Experian and TransUnion.

[3] In an earlier study, the CFPB Office of Research estimated that 17 percent of consumers with a credit record borrowed using BNPL at least once between February 2021 and February 2022. *See* Cortnie Shupe, Greta Li and Scott Fulford, Consumer Use of Buy Now, Pay Later*, available at* https://www.philadelphiafed.org/-/media/frbp/assets/consumer-finance/discussion-papers/dp22-02.pdf (last visited December 3, 2024). In one of the first surveys on this topic the Federal Reserve Bank of Philadelphia estimated usage rates in the previous 12 months in 2021 to be 31 percent, although they reported that respondents appeared to report traditional installment loans in addition to the pay-in-four product. A follow-up study that attempted to focus on the pay-in-four product found a usage rate close to 18 percent in the fourth quarter of 2022. *See* Tom Akana and Valeria Zeballos Doubinko, 4-in-6 Payment Products – Buy Now, Pay Later: Insights from New Survey Data, Federal Reserve Bank of Philadelphia, February 2024, *available at* https://www.philadelphiafed.org/-/media/frbp/assets/consumer-finance/reports/bnpl-survey-insights.pdf (last visited December 3, 2024). The New York Fed estimated a 19 percent usage rate between June 2022 and June 2023. *See* Felix Aidala, Daniel Mangrum, and Wilbert van der Klaauw, Who Uses Buy Now, Pay Later, September 2023, *available at* https://libertystreeteconomics.newyorkfed.org/2023/09/who-uses-buy-now-pay-later/ (last visited December 3, 2024). The Federal Reserve Bank of Boston estimated that nine percent of consumers used the product in the 30 days prior to being surveyed in fall 2023. *See* Joanna Stavins, Buy Now, Pay Later: Who Uses It and Why, the Federal Reserve Bank of Boston, *available at* https://www.bostonfed.org/publications/current-policy-perspectives/2024/buy-now-pay-later-who-

surveys have acknowledged the difficulty respondents often have in distinguishing pay-in-four loans from traditional point-of-sale (POS) installment loans, which typically finance larger purchases with interest, yet are often marketed as BNPL.[4] Moreover, in addition to the pay-in-four product, some BNPL lenders also offer typical POS installment loans, making it even more difficult for survey respondents and researchers to distinguish between the two types of products using survey methods. This challenge also exists for researchers using transaction data from data aggregators, as it is not possible to confidently determine by firm name whether a transaction is a pay-in-four transaction or a traditional installment. This report aims to provide general descriptive statistics that are representative of the typical pay-in-four BNPL product.

As part of its efforts to monitor the BNPL market, the Consumer Financial Protection Bureau (CFPB) utilized its authority under section 1022(c)(4)(B)(ii) of the Dodd-Frank Wall Street Reform and Consumer Protection Act to obtain a representative sample of de-identified application- and loan-level data from six large BNPL lenders. Each firm selected a subsample of records based on day of birth in order to ensure a random sample that would cover the same group of consumers across firms. The request was limited to the pay-in-four product, which companies can easily parse out in their data, as they generally treat it as a separate business model from traditional POS installment loans. Lenders participating in the market monitoring orders were Affirm, Afterpay, Klarna, PayPal, Sezzle and Zip.

We used probabilistic matching to link consumers' de-identified BNPL loans across firms and with their corresponding credit records obtained from one of the NCRCs. This matched dataset enables a more complete view of consumers' unsecured debt obligations and allows us to produce statistics that are representative of the average adult in the U.S. with a credit record.

We find that 21 percent of consumers with a credit record financed at least one purchase at one of the six firms using BNPL in 2022, the most recent year of data. In this same year, the average (median) purchase amount was $142 ($108). We characterize approximately 20 percent of

uses-it-why.aspx (last visited December 4, 2024). Finally, the FDIC estimated that roughly 4 percent of all households had used the product in 2023. *See* FDIC, "2023 FDIC National Survey of Unbanked and Underbanked Households," *available at* https://www.fdic.gov/household-survey/2023-fdic-national-survey-unbanked-and-underbanked-households-report (last visited December 3, 2024).

[4] *See* Shupe et al. 2023; Akana and Doubinko 2024; and Akana 2022. In contrast to the BNPL pay-in-four product, traditional installment loans are structured to be repaid in more than four installments and/or are structured to charge interest or a finance fee. These loans tend to be for larger purchase amounts than a BNPL loan and lenders often furnish originations and payment history to credit bureaus and make hard inquiries into the applicant's credit file during the underwriting process. In contrast, the BNPL underwriting process generally involves only a soft inquiry. For more information on the difference between hard and soft inquiries, see CFPB, "What's a credit inquiry?" (September 4, 2020), *available at* https://www.consumerfinance.gov/ask-cfpb/whats-a-credit-inquiry-en-1317/ (last visited December 9, 2024).

borrowers as heavy users, originating more than one BNPL loan on average per month in 2022, up from 18 percent in 2021.

BNPL loan approval rates increased during the time period studied, in part due to the increased use of counteroffers.[5] Between 2020 and 2022, lenders increased approval rates for consumers with subprime and deep subprime credit scores as well as for consumers without a FICO score in the month in which they applied. Consumers with subprime or deep subprime scores were responsible for nearly two-thirds of BNPL originations. While loans originated to consumers in these score categories had higher default rates than those for consumers with higher FICO scores, BNPL borrowers classified as deep subprime and those without a FICO score still repaid their loans 96 percent of the time.[6] Broken down by year and age group, BNPL default rates remained well below those of credit cards among the BNPL borrower population.[7]

Many BNPL borrowers originate several loans simultaneously, a practice that is particularly pronounced during the holidays, when BNPL use tends to spike. We find that approximately 63 percent of borrowers originated multiple simultaneous loans at any firm at some point during the year, in 2021 and 2022, with 32 percent taking out BNPL loans across different firms in 2021 and 33 percent taking out BNPL loans across multiple firms in 2022. Because lenders do not generally furnish loan originations and performance information to credit bureaus, these loans remain unobserved in credit records.

By matching BNPL loans to credit records, we show that BNPL borrowers are more likely to have open balances in all types of non-BNPL unsecured credit products examined, including credit cards, personal loans, retail loans, student loans and other types of alternative financial services (AFS), such as payday and installment loans.[8] Moreover, they hold higher amounts of

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[5] Counteroffers may include a higher downpayment or approval for a lower amount of credit.

[6] As noted earlier, most BNPL firms require customers to set up automatic repayments via their credit card, debit card, or checking account.

[7] In May 2024, the CFPB issued an interpretative rule that clarified that Buy Now, Pay Later lenders are "credit cards" under Regulation Z. Throughout this report, the term "credit cards" is used to refer to conventional credit cards. *See* CFPB, "Use of Digital User Accounts to Access Buy Now, Pay Later Loans" (May 22, 2024), available at https://www.consumerfinance.gov/rules-policy/notice-opportunities-comment/open-notices/use-of-digital-user-accounts-to-access-buy-now-pay-later-loans/ (last visited January 8, 2025).

[8] We define other alternative financial services as all non-traditional loans in the consumer's alternative credit bureau records. This alternative credit bureau is owned by the NCRC from which we obtained the traditional credit records and it collects and provides information on trades and inquiries from sub-prime lenders. Non-traditional loans include those from single-payment micro loans (SPML, or traditional payday loans), installment loans, rent-to-own agreements, auto title and other unclassified non-traditional industries. Among these industries, only SPML and installment loan trades are identifiable in the alternative credit bureau data as a separate category.

these types of debt compared to non-BNPL users, even controlling for age, credit score and seasonal variation in BNPL use.

Finally, this report shows that credit card utilization rates increase steadily in the year prior to consumers' first-time BNPL use, suggesting that decreasing credit availability could be one factor motivating BNPL use. Indeed, between 2020 and 2023, the average credit card utilization rate among BNPL borrowers remains notably high, between 60 and 66 percent.

III. Data and Sample

The analysis in this report is based on two datasets. The first dataset includes an approximately 16 percent random sample, based on day of birth, of all BNPL applications from six large BNPL firms from the time these firms began originating BNPL loans in the United States through the end of 2022. One firm began extending loans in 2017, three firms began lending in 2019, and two firms began in 2020. The dataset contains approximately 145 million BNPL applications from 2017 through 2022. This sample is generally representative of the typical BNPL applicant, and the subset of applicants that took out a loan is generally representative of the typical BNPL borrower. We refer to this dataset as the raw, or unmatched sample, and we use it to characterize the macroeconomic significance of this market and analyze general transaction-level trends.

In 2022, the most recent year of available data, Table 1 shows that the dataset contains approximately 66 million BNPL loan applications, of which approximately 69 percent resulted in originations. Scaling to account for the size of the sample, the data represent approximately 277 million BNPL loans with a gross merchandise value of roughly $34 billion at the six BNPL lenders combined. To place this number in context, it represents approximately one percent of total spending on credit cards in the same year.[9]

TABLE 1: BNPL MACROECONOMIC STATISTICS, 2022

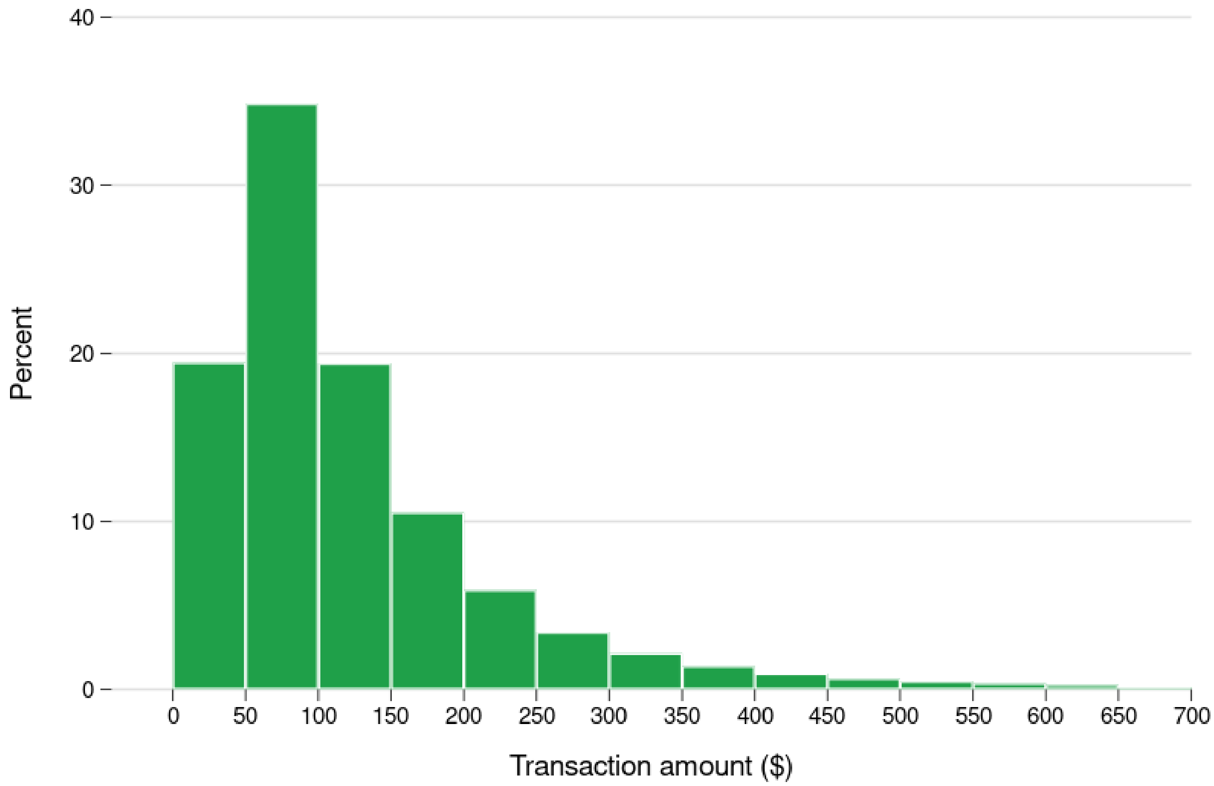
	Raw sample observations	Scaled aggregate statistics
Number of loan applications	66.1 million	401.9 million
Number of originated loans	45.6 million	277.3 million
Gross merchandise value	$5.6 billion	$33.8 billion

Note: The scaled macroeconomic statistics are the result of multiplying column 1 by 73/12 to account for the sample size.

In the unmatched sample of all originations from all six firms, the typical BNPL loan in 2022 was under $100 (inflation-adjusted to September 2024 dollars). Figure 1 shows this distribution, omitting loans above the 99th percentile of gross origination amounts for exhibition purposes. The mean transaction amount in this sample was $131.

[9] *See* CFPB, The Consumer Credit Card Market, October 2023, *available at* https://files.consumerfinance.gov/f/documents/cfpb_consumer-credit-card-market-report_2023.pdf (last visited October 15, 2024).

FIGURE 1: DISTRIBUTION OF GROSS TRANSACTION AMOUNTS FOR ALL ORIGINATIONS IN 2022



Note: Approximately 45.6 million observations. Gross transaction amounts have been CPI adjusted to September 2024 prices.

The second dataset used in this report is composed of a subsample of the CFPB's Consumer Credit Information Panel (CCIP) that contains consumers' non-BNPL loan obligations, credit scores and other credit record information sourced from one of the three nationwide credit reporting companies. This subsample of the CCIP is based on the same five days of birth (in any month) as the raw sample of BNPL applications above to ensure that the BNPL records could be matched to the CCIP subsample. Beginning with this approximately 16 percent random sample of the CCIP, we further restrict the sample to consumers born between 1953 and 2006 (age 18-70 at any time between 2018-2023).[10] The final sample contains an unbalanced panel of approximately 520,000 consumers in each year of observation. The CCIP subsample serves as the master dataset with which BNPL loans are merged, and we retain all CCIP records in the subsample, including consumers with and without a BNPL loan match. Consequently, the CCIP matched sample is representative of the U.S. adult population born between 1953 and 2006 with a credit record. We link the de-identified BNPL loans to the de-identified credit records in order

[10] Approximately five percent of the credit bureau records is missing date of birth information and is omitted from the matched dataset.

to generate statistics that are representative of the average consumer with a credit record, and to better understand how consumer finances of BNPL borrowers compare to the average consumer with a credit record. We also use this sample to determine the degree of BNPL loan stacking across firms and to analyze BNPL borrowers' non-BNPL financial obligations.[11]

Because the BNPL applications represent the same approximately 16 percent random subsample as the CCIP dataset described in the previous paragraph, and because the CCIP is a two percent random sample of U.S. adult consumers with a credit record, the expected match between the two datasets is approximately two percent. By assuming a two percent match between the BNPL applicants and the CCIP, we are able to scale the observed share of consumers who borrowed using BNPL to a population average for consumers of the given age range with a credit record. Table 2 shows the BNPL adoption rate: roughly 21 percent of consumers with a credit record borrowed using BNPL from at least one of the six firms at least one time during 2022. The share increased from about 18 percent in 2021. In both years, the average transaction amount was around $140, slightly higher than in the unmatched sample.

TABLE 2: BNPL USE 2021-2022

	2021	**2022**
Percent who borrowed with BNPL	17.6%	21.2%
Average transaction amount ($)	141	142
Median transaction amount ($)	110	108
Number of unique consumer observations	519,325	524,773

Note: To calculate the share of consumers, we assume a two percent match rate between the unique consumers in each firm's file and the CCIP, as the CCIP represents a random two percent sample of consumers with a credit record. This number adjusts for the match rate between the firm data and CCIP. Dollar amounts have been CPI adjusted to September 2024.

[11] Loan stacking refers to the practice of taking out multiple BNPL loans simultaneously or taking out BNPL loans with multiple lenders simultaneously. It was identified in a previous CFPB report as an area of potential risk for consumer finances. See Kleinbard et al. 2022.

IV. BNPL Aggregate Trends

In recent years, online and brick-and-mortar merchants have increasingly partnered with BNPL lenders to offer BNPL products to their customers as a method of payment at checkout. This proliferation has greatly increased consumers' awareness of BNPL, with one survey finding that the percentage of American consumers who had heard of BNPL increased from 56 percent to 73 percent between 2021 and 2022 alone.[12]

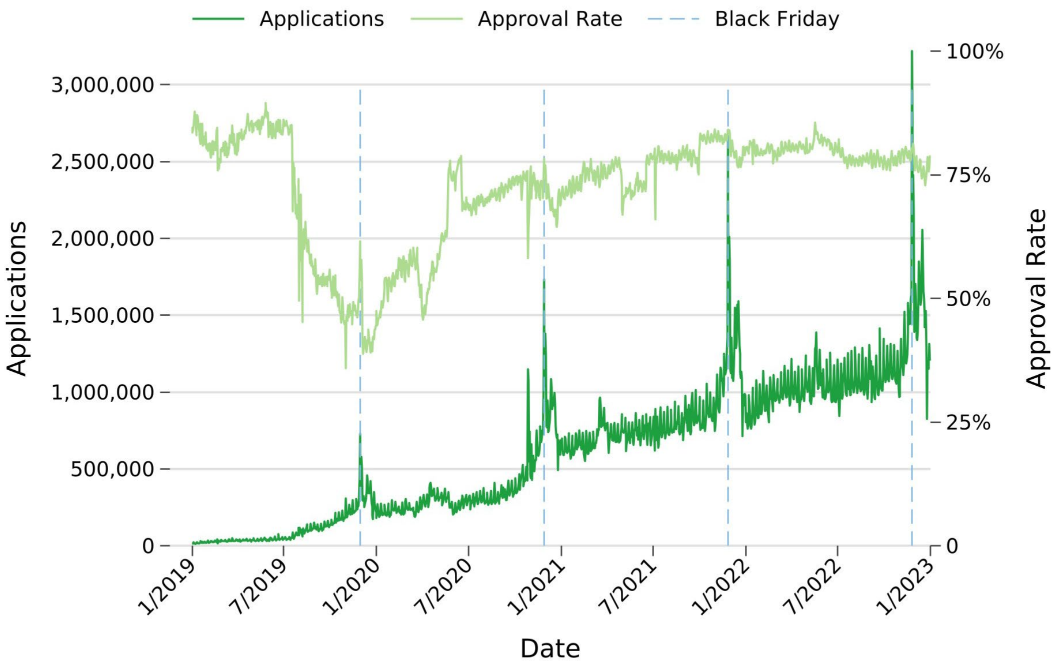
Figure 2 below shows the trajectory of BNPL applications and credit approval rates at the six lenders surveyed. In 2019 consumers averaged just over 100,000 daily applications (dark green line). By 2022, consumers applied for an average of well over 1 million loans each day. As is the case with many unsecured credit products, demand for BNPL increases sharply during the holiday season, with spikes in BNPL applications at the end of November and early December of each of the four years studied, in particular on Black Friday.

In addition to the increase in the number of applications, BNPL lenders also increased the share of applications that they approved (light green line) from 56 percent of applications in 2019 to 79 percent in 2022.[13] One reason for the increase in the approval rate between 2019 and 2022 is that lenders often use their customers' past repayment history to underwrite or supplement their underwriting strategy. As BNPL use expands, a larger share of applicants consists of returning customers, for whom the lender does not rely solely on credit information from one of the three NCRCs.

[12] Stavins, Joanna. 2024. "Buy Now, Pay Later: Who Uses It and Why." Federal Reserve Bank of Boston Current Policy Perspectives No. 24-3.

[13] On average, the six lenders approved 67 percent of applications in 2020 and 78 percent in 2021.

FIGURE 2: DAILY APPLICATIONS AND APPROVAL RATES



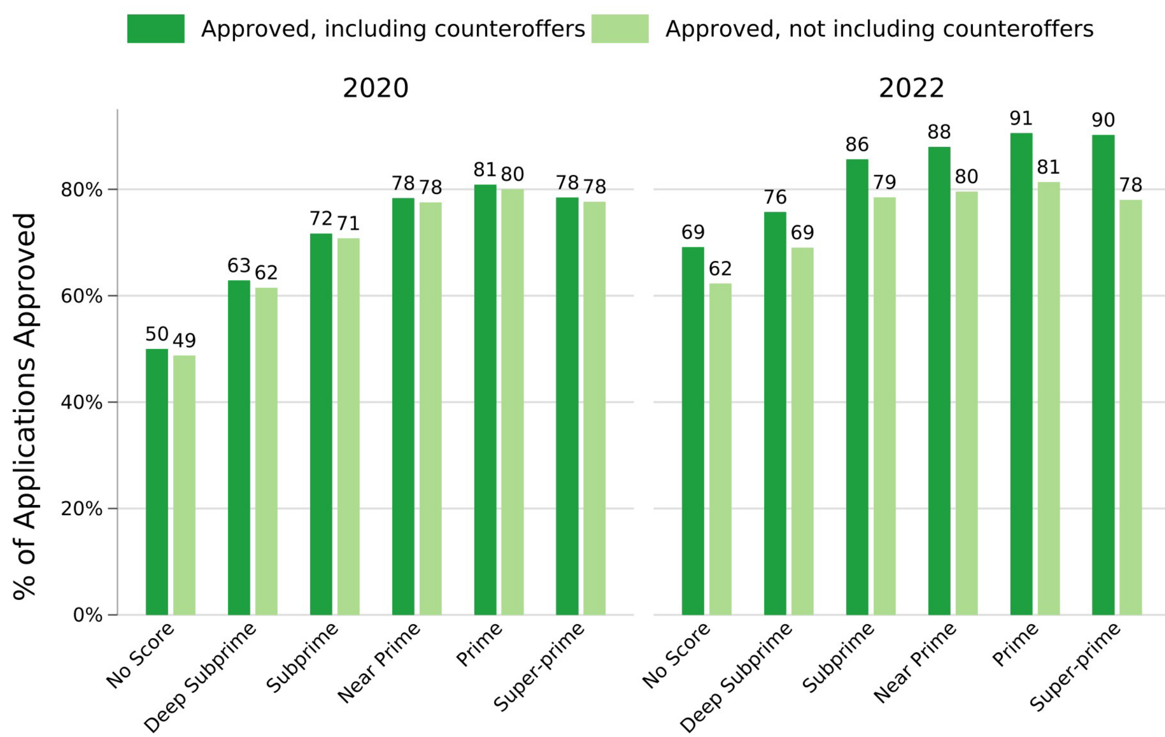
Note: Data sourced from the 16% sample of BNPL applications from six large BNPL firms. It has been CPI-adjusted and scaled to reflect the sample size. Applications and approvals are counted on the day of origination. The approval rate includes loans that are originated after counteroffers.

A second reason for the increase in BNPL origination rates is that BNPL lenders increased their use of counteroffers from 2020 to 2022. In most cases the consumer selects BNPL as the payment option during checkout while shopping online, and the BNPL provider either approves or declines the consumer for the requested loan amount. In recent years, however, BNPL lenders have begun making some applicants a counteroffer rather than declining the application outright.[14] For instance, BNPL lenders may offer prospective borrowers loans that differ slightly from what they initially requested. These counteroffers may include, for example, a larger downpayment above the typical 25 percent, or a lower amount of credit approved for the given purchase, requiring the consumer to reduce the merchandise value in their shopping cart before proceeding. Figure 3 depicts approval rates by credit score category, excluding and including counteroffers for applicants in 2020 compared to 2022.

[14] Counteroffers often occur in consumer lending outside of the BNPL market. For example, for counteroffers in the context of mortgage markets *see* Endre J. Reite, "Information Asymmetry between Banks, Rent Extraction, and Switching in Mortgage Lending," *Finance Research Letters*, 50 (2022): 103339, *available at* https://doi.org/10.1016/j.jempfin.2023.101431 and Steven Ongena, Florentina Paraschiv and Endre J. Reite, "Counteroffers and Price Discrimination in Mortgage Lending," *Journal of Empirical Finance* 74 (2023): 101431.

In 2020, BNPL lenders' use of counteroffers was limited; across borrowers in each FICO score category, the approval rate only increased about one percentage point when including counteroffers as approvals compared to considering counteroffers as rejections. By 2022, however, BNPL lenders began increasingly leveraging counteroffers to approve more consumers across every score category. The overall approval rate in 2022 is approximately 8 percentage points higher when counting counteroffers as approved applications.

FIGURE 3: PERCENT OF CONSUMERS IN EACH SCORE CATEGORY APPROVED FOR BNPL LOAN, 2020 VS. 2022



Note: CCIP sample of applications in 2020 juxtaposed to the CCIP sample of applications in 2022. FICO score categories are defined as 300-579 for deep subprime, 580-619 for subprime, 620-659 for near prime, 660-719 for prime, and 720-850 for super-prime.[15] This figure requires a match between the BNPL applications and the CCIP in order to harmonize the scores used by different lenders.

On average in 2022, BNPL lenders approved 78 percent (including counteroffers) of applications from consumers with subprime or deep subprime credit scores.[16] Moreover, while

[15] We define categories in line with myFICO, the official consumer division of FICO, available at https://www.myfico.com/credit-education/blog/prime-vs-subprime-loans (last visited December 16, 2024). Lenders may use different score ranges for these classifications.

[16] This statistic is calculated as the share of applications from consumers with subprime or deep subprime FICO scores that were approved.

all six BNPL firms included in this report conducted soft pulls of consumers' credit records as part of the credit underwriting process, firms still approved 62 percent of consumers without a FICO score without counteroffers in 2022.[17]

Indeed, a third factor contributing to the growth in BNPL originations is the willingness of lenders to approve loans to consumers with low FICO scores and without FICO scores. Table 3 shows that from 2021 to 2022, consumers with deep subprime and subprime FICO scores accounted for over sixty percent of all originated BNPL loans. Borrowers without a FICO score accounted for approximately 4 percent of originated loans across 2021 and 2022.[18]

TABLE 3: ORIGINATIONS AND DEFAULTS BY CREDIT SCORE CATEGORY, 2021-2022

Score Categories	Share of Originations	Default Rate
No Score	3.9%	4.1%
Deep Subprime	45.0%	3.5%
Subprime	16.0%	1.1%
Near Prime	12.7%	0.8%
Prime	13.2%	0.7%
Super-prime	9.1%	0.8%
Observations	*892,668*	

Note: FICO score categories are defined as 300-579 for deep subprime, 580-619 for subprime, 620-659 for near prime, 660-719 for prime, and 720-850 for super-prime. These statistics require a match between the BNPL applications and the CCIP in order to harmonize the scores used by different lenders. The default rate is calculated as the share of originated loans by borrowers in each score category that were defaulted.

While consumers with no FICO scores and those rated as deep subprime exhibited higher default rates on loans originated in 2021-2022 compared to consumers with higher FICO scores, they still repaid their BNPL loans 96 percent of the time.[19]

Growth in both the number of applications and in the share of approved applications corresponds with increases in cumulative transaction volumes. Figure 4 depicts daily gross

[17] Some firms use other credit scoring models such as VantageScore or eBureau scores as part of their underwriting processes. Firms may also request additional information from consumers prior to approving them for loans. We use the FICO score from the CCIP to create a harmonized measure of creditworthiness across borrowers of different BNPL lenders.

[18] A separate analysis reveals that borrowers without a FICO score accounted for 4 percent of originations in just 2022.

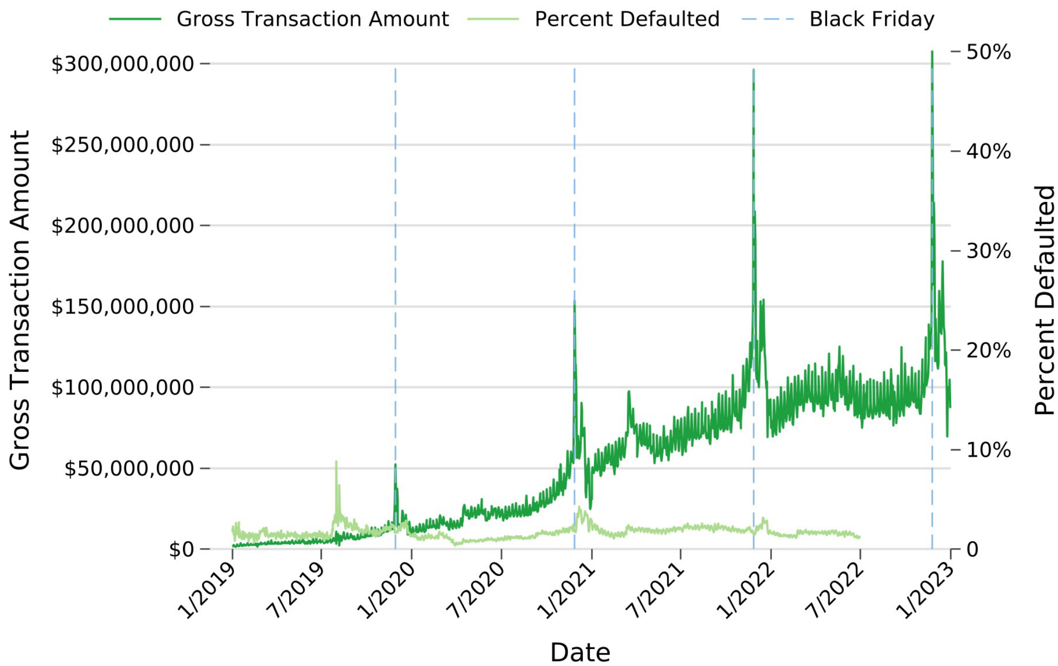
[19] The data do not contain information on late payments. Defaults are defined as not repaying within 120 days past the due date, when lenders denote the payment as charged off. As noted earlier, most BNPL firms require customers to set up automatic repayments via their credit card, debit card, or checking account.

merchandise value from January 1, 2019 through December 31, 2022. In 2019, consumers purchased less than $7 million in gross merchandise value each day, on average, using BNPL; by 2022, consumers purchased merchandise worth nearly $100 million on average each day using BNPL. BNPL spending is highly seasonal, with marked increases during the holiday season. For example, consumers borrowed an average of nearly $150 million each day from Black Friday to Christmas Eve in 2022, well above the average spent during the rest of the year.

In addition to spending more during the holiday season, consumers were also more likely to default on their BNPL loans originated during this period. However, across the three holiday seasons that we observe, this relationship between holiday season borrowing and defaults has become less pronounced over time. This decoupling could partially reflect BNPL lenders' targeted tightening of their underwriting criteria in some segments or for some merchants during this period, or a change in borrower composition over time, or a combination of other factors. Overall, even with the increase in defaults during the holiday season, default rates on BNPL loans are lower than default rates on credit cards, discussed further below in Section V. In 2022, consumers defaulted on just 1.2 percent of the money that they borrowed via BNPL.[20]

[20] This statistic is calculated as the share of the gross transaction amount that was charged off because it was more than 120 days past due. As noted earlier, most BNPL firms require customers to set up automatic repayments via their credit card, debit card, or checking account.

FIGURE 4: GROSS DAILY TRANSACTION AND CORRESPONDING DEFAULT AMOUNTS



Note: Data sourced from the raw, unmatched sample of BNPL applications from six large BNPL firms. It has been CPI-adjusted and scaled to reflect the size of the sample. Transaction amounts and defaulted amounts are measured on the day of origination. Defaults are defined as at least 120 days past due such that defaults are for loans originated at the end of 2022 are not observed. The figure shows default rates according to the date of loan origination. Because charge-offs may not be present in the dataset in the second half of 2022 if disputes were ongoing when firms sent their data, we conservatively cut off the date at which the Figure shows defaults. Generally, 120 days past due are counted from the first delinquency, which would be up to 120 days and six weeks after origination. However, firms exercise discretion with customers and may not record outstanding loans as charged off by this date.

V. Loan Stacking and Borrowing Persistence

Unlike the lenders of other unsecured credit products, like credit cards, BNPL lenders do not typically report consumers' BNPL obligations and general repayment history to the three NCRCs.[21] As a result, other creditors have little to no visibility into consumers' historical or outstanding BNPL obligations when underwriting loans. As the prevalence of BNPL has grown, some lenders and market observers have raised concerns that traditional measures of household debt may be systematically undercounting consumers' total unsecured debt obligations.[22] By linking consumers' de-identified BNPL loans to their credit records, we are able to identify the extent to which consumers originate BNPL loans across different firms, as well as how BNPL fits in with the rest of their unsecured debt portfolio.

BNPL borrowers in the CCIP matched data often have more than one active BNPL loan at any given time, as around 63 percent of BNPL borrowers had simultaneous loans (from any BNPL lender(s)) at some point during 2021 and 2022. However, many BNPL borrowers do not appear to be users of just one preferred provider, but rather open to borrowing with multiple different lenders, likely a reflection of many factors. For any given purchase, consumers typically choose from only a limited subset of all BNPL lenders at checkout based, in part, on merchant partnerships.[23] A large degree of homogeneity across BNPL services may also play a role. Finally, consumers may take out loans from multiple BNPL lenders because they want more credit than a single lender will provide. Table 4 shows that, indeed, across 2021 and 2022, approximately 32 percent of BNPL borrowers had simultaneous, active BNPL loans with at least two BNPL different firms.[24] While non-BNPL lenders generally cannot observe any of the BNPL

[21] While some BNPL lenders have begun to report traditional POS installment loans with longer terms and larger loan amounts, they generally do not report the traditional pay-in-four BNPL loans. Other products that generally do not furnish consumer debt obligations to NCRCs include paycheck advance products as well as some rent and utility payments.

[22] *See* Jessica Dickler, "Could your buy now, pay later loans affect your credit score? Here's what you need to know," CNBC, May 10, 2024, *available at*: https://www.cnbc.com/2024/05/10/how-buy-now-pay-later-loans-could-affect-your-credit-score.html.

[23] Some BNPL lenders provide single-use virtual cards that their customers can use at non-merchant partners.

[24] Note that this is likely an undercount of the number of consumers with simultaneous loans. One firm, which is responsible for approximately 19 percent of transactions in the unmatched sample, did not supply enough information for their loans to be matched to credit records. Therefore, we cannot quantify the overlap in customers between that firm and the other firms.

loans in credit records, even BNPL firms do not observe loans at other firms, such that loan stacking across firms presents a particular blind spot.

TABLE 4: BNPL LOAN STACKING

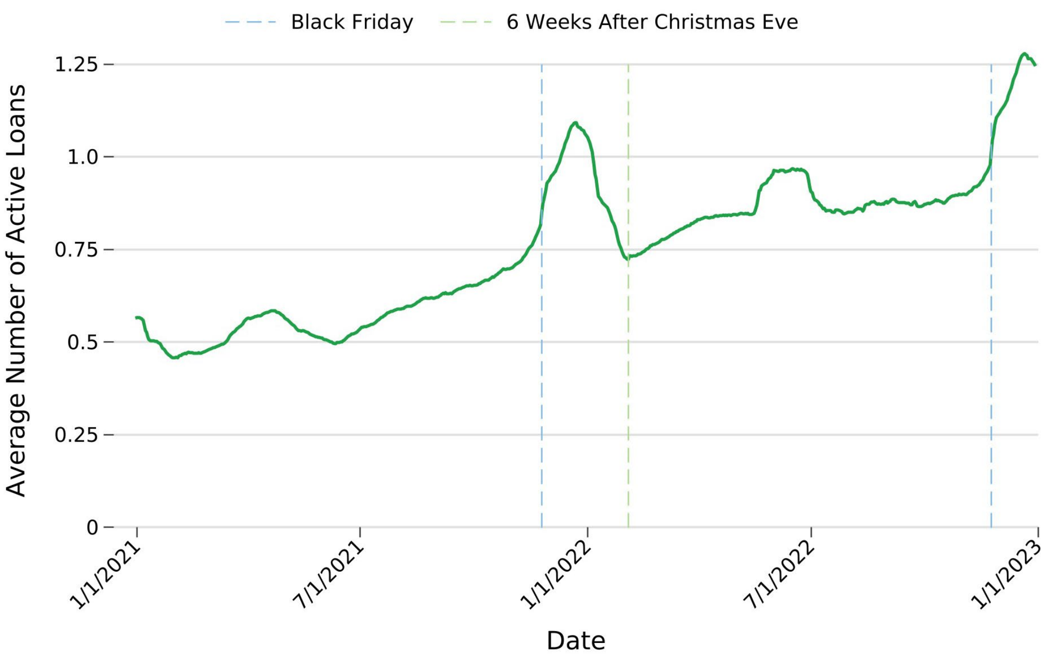
	2021	2022
A. Percent of BNPL borrowers		
With simultaneous loans at any firm(s)	62.8%	62.7%
With simultaneous loans at different firms	31.7%	32.6%
Observations	*42,886*	*55,675*
B. Percent of adult population (with a credit record)		
With simultaneous loans at any firm(s)	5.2%	6.6%
With simultaneous loans at different firms	2.6%	3.5%
Observations	*519,325*	*524,773*

Note: CCIP matched sample. Panel A is restricted to BNPL borrowers in the sample, defined as having originated at least one BNPL loan in the given year. Numbers in Panel B are calculated out of the entire CCIP matched sample that includes BNPL borrowers and non-borrowers. Simultaneous loans are defined as having originated a subsequent BNPL loan within 42 days of the first, conditional on originating any BNPL loan in the given year. The difference between the share of consumers with simultaneous loans at different firms and the share with simultaneous loans overall yields the average share of consumers with simultaneous loans at any given firm.

Just as BNPL originations spike during the holiday season, as shown in Figure 5, holding multiple BNPL loans at the same time is also more common during the holiday season. In 2021 and 2022, the average number of active BNPL loans per borrower steadily rose throughout the year before spiking between Black Friday and Christmas Eve, the height of the holiday shopping season.

Table 5 shows that BNPL borrowers, on average, took slightly more time before originating a subsequent BNPL loan in 2022 compared to 2021. In 2022, borrowers waited 45 days between originations, compared to an average of 42 days in 2021. However, both the average and median number of BNPL originations per consumer increased, from approximately nine in 2021 to approximately ten in 2022 on average, and from three to four for the median borrower.

FIGURE 5: AVERAGE NUMBER OF ACTIVE BNPL LOANS PER CONSUMER BY DATE, 2021-2022



Note: CCIP matched sample of all originated loans. Simultaneous loans are defined as more than one loan originated within 42 days of each other. Conditional on having originated at least one loan, this statistic measures the number of BNPL loans that the average borrower has active on a given day.

TABLE 5: BNPL BORROWER STATISTICS

	2021	**2022**
Average number of originations per consumer	8.5	9.5
Median number of originations by consumer	3	4
Average days between originations	42.4	44.8
Median days between originations	27.5	29.3
Average number of daily loans across borrowers	0.9	1.1
Median borrower's average number of daily loans	0.3	0.4
Observations	*42,886*	*55,675*

Note: Data sourced from CCIP matched sample of originated loans in 2021 and 2022. The average number of loans on a given day is defined as the total number of simultaneous loans across all borrowers on each day of the respective year, divided by the 365 days. The median number of loans on a given day is by taking the average number of loans per consumer and the median of that number across consumers. All statistics are conditional on having at least one originated loan in the given year.

Growth in the average number of loans per borrower is driven, in part, by heavy BNPL users. We define heavy users as those who, on average over the year, originated more than one BNPL loan per month (i.e., more than 12 loans each year). We define occasional users as those who originated between one and twelve BNPL loans. As shown in Table 6, heavy users accounted for approximately one-fifth of borrowers in 2021 and 2022. By definition, heavy users' borrowing behavior differs substantially from that of occasional users. The average heavy user (i.e. the median among heavy users) originated 22 and 23 BNPL loans in 2021 and 2022 respectively, while the median occasional user originated just two loans annually over the same time period. Broken down into a daily average, the median heavy user held almost three active loans on any given day. Heavy users also took much less time between their originations than did occasional users. Table 13 in the Appendix breaks down the share of heavy users and occasional users by FICO score category for 2022 and shows that 68 percent of originations from heavy users have either a deep subprime or subprime credit score or do not have a FICO score.

TABLE 6: BNPL BORROWER STATISTICS, HEAVY VS. OCCASIONAL USERS

	2021		2022	
	Heavy Users	**Occasional Users**	**Heavy Users**	**Occasional Users**
Share of Users	18.3%	81.7%	20.3%	79.7%
Median originations by consumer	22	2	23	2
Median days between by originations	13.4	38.0	13.6	41.4
Median borrower's average number of daily loans	2.5	0.2	2.6	0.3
Observations	*7,833*	*35,053*	*11,290*	*44,385*

Note: Data sourced from the CCIP matched sample of originated loans in 2021 and 2022. The median number of loans on a given day is by taking the average number of loans per consumer and the median of that number across consumers. All statistics are conditional on having at least one originated loan in the given year.

From 2019 to 2022, average BNPL default rates, defined as the percentage of originated loans that were 120+ days past due, remained below 3 percent (Table 7). Default rates are highest amongst the youngest borrowers, those between ages 18 and 24.

TABLE 7: BNPL DEFAULT RATES BY AGE GROUP, 2019-2022

	18-24	25-33	34-40	41-50	51-64	65+	Overall
Total	2.9%	2.4%	1.9%	1.5%	1.5%	1.4%	2.1%
2019	2.6%	1.9%	1.4%	1.9%	1.2%	4.8%	1.9%
2020	2.3%	1.7%	1.2%	0.9%	1.1%	1.0%	1.5%
2021	3.5%	2.9%	2.2%	1.8%	2.0%	1.3%	2.5%
2022	2.7%	2.2%	1.9%	1.5%	1.3%	1.4%	1.9%

Note: Data sourced from the CCIP matched sample of originated loans. Default is defined as 120+ days past due. Default rates are calculated as a share of originations in each age group reported as 120+ days past due.

To help put these default rates in context, we compare default rates for BNPL and for credit cards. While we undertake this comparison between BNPL repayment and credit card repayment, we note that there are structural differences between the two products that could lead to different repayment and default rates. For instance, the difference in default rates between BNPL and credit cards is likely due in part to the fact that BNPL lenders require borrowers to set up automatic repayment using their debit or credit card.[25] Nonetheless, Table 7 shows that BNPL default rates are quite low compared to credit card default rates for the same population, despite both increased loan stacking and the fact that the many BNPL users have low credit scores (Table 8). Indeed, BNPL borrowers defaulted on their credit cards at much higher rates over the same time period, defaulting over 10 percent of the time. Table 14 in the Appendix additionally shows default rates defined as the share of the open credit amount that BNPL borrowers charged off for BNPL and credit card accounts.

TABLE 8: CREDIT CARD DEFAULT RATES OF BNPL BORROWERS BY AGE GROUP, 2019-2022

	18-24	25-33	34-40	41-50	51-64	65+	Overall
Total	7.3%	10.4%	11.7%	11.0%	8.7%	6.3%	10.1%
2019	12.7%	16.0%	15.7%	14.7%	11.9%	11.5%	14.7%
2020	8.1%	12.4%	14.6%	13.5%	10.2%	7.0%	12.3%
2021	6.6%	10.0%	11.6%	11.1%	9.1%	6.7%	10.1%
2022	5.4%	8.8%	10.0%	9.6%	7.8%	6.0%	8.7%

Note: This sample is a subset of the matched CCIP sample who also have credit cards. Default rates are calculated as the share of credit cards in a given year and age group that were 120+ days past due. Credit card companies may use different definitions for default. We define them here as 120+ days past due for the purpose of comparison with Table 7.

[25] *See* Kleinbard et al. 2022.

VI. Total Unsecured Consumer Debt Burden

Consumers choose from many types of unsecured credit options, of which Buy Now, Pay Later loans are one option. Other types of unsecured credit that we observe in the credit bureau records include student loans, credit cards, personal loans, retail loans, and other types of alternative financial services from sub-prime lenders, such as payday and installment loans. We define a consumer's total unsecured debt burden as the sum of open balances in these types of loans and their total BNPL purchase amounts.

Table 9 shows that heavy BNPL users defined, as above, as borrowers who originated more than 12 BNPL loans in 2022, are more likely than occasional BNPL borrowers and non-BNPL borrowers to have open balances in all types of unsecured credit products examined. We do not observe directly whether consumers with credit card open balances are revolving and thus paying interest on the balance or simply transacting on the credit card. Nonetheless, we note that 89 percent of heavy BNPL users have open balances on credit cards compared to 85 percent of occasional borrowers and 82 percent of non-BNPL borrowers. Heavy BNPL users are also approximately 11 percentage points more likely than occasional BNPL borrowers and 31 percentage points more likely than non-BNPL borrowers to have open balances on personal loans. Heavy BNPL borrowers are more than twice as likely and occasional BNPL borrowers are almost twice as likely to have open student loan balances compared to non-BNPL borrowers. Finally, whereas only one percent of consumers without any BNPL loans in 2022 had open balances in subprime AFS, nearly eight percent of heavy BNPL borrowers and nearly four percent of occasional BNPL borrowers also had open AFS balances in 2022.

TABLE 9: SHARE OF CONSUMERS WITH ANY AMOUNT OPEN, UNSECURED BALANCES IN 2022, BY BNPL BORROWER GROUP

	Heavy BNPL users	Occasional BNPL users	No BNPL use
Credit cards	89.2%	84.6%	81.5%
Personal loans	49.2%	38.4%	18.3%
Retail loans	54.9%	46.5%	36.6%
Alternative financial services	7.8%	3.9%	0.9%
Student loans	45.3%	39.7%	21.0%
Observations	11,291	44,384	469,098

Note: CCIP matched sample. The sample omits observations from one firm that did not provide sufficient information to match their BNPL records to credit records. Observation counts not adjusted for the match rate between BNPL and credit records. Heavy use is defined as more than 12 BNPL loans originated in 2022. Occasional use is defined as having originated between one and 12 BNPL loans in 2022.

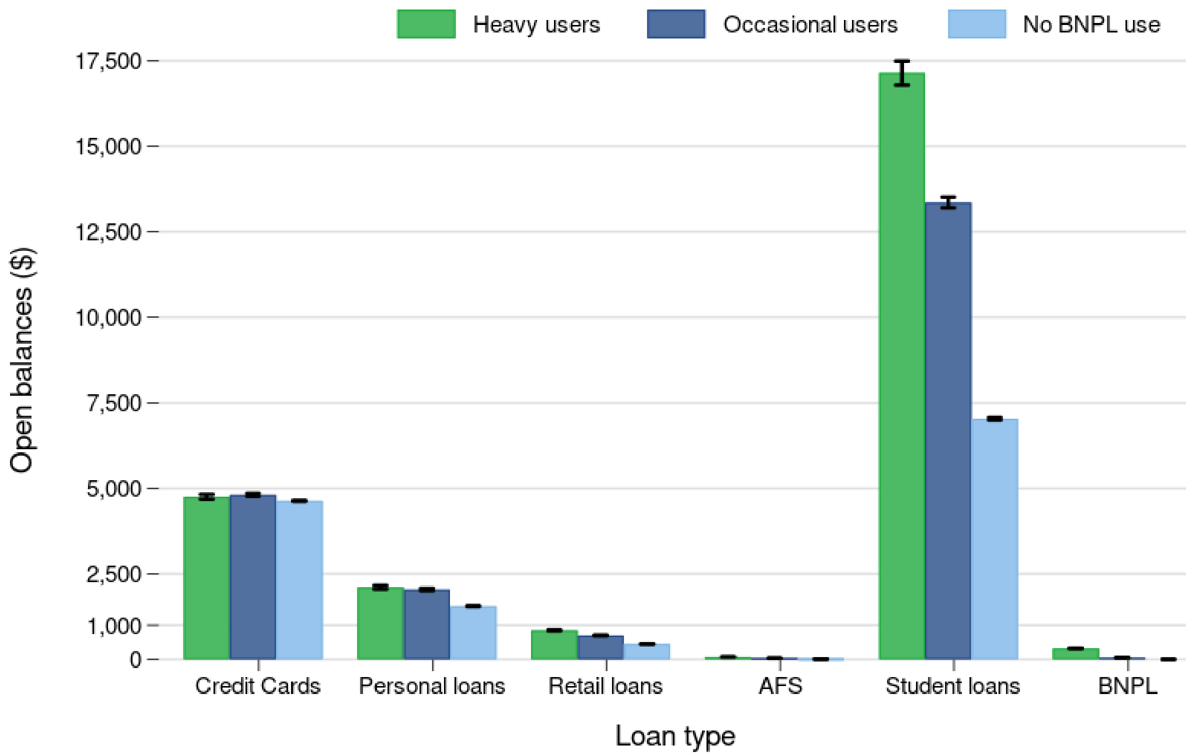
Figure 6 depicts average monthly open balances in unsecured consumer debt for heavy and occasional BNPL users and non-BNPL users in 2022. For all types of unsecured credit, we calculate a group average for all consumers in the CCIP across all months of 2022. Zero balances are included for the purpose of providing a representative statistic for consumers with a credit record in each BNPL use group. Consequently, the average amount of open balances is lower for credit types in which consumers are less likely to have any balance amount open, for instance if they do not use that type of credit (AFS).

Among types of unsecured credit held by BNPL borrowers, student loans dominate, with heavy users owing approximately $16,800 in student loans on average and occasional BNPL users owing approximately $13,200 on average. Open balances on credit cards amounts to approximately $4,600-$4,800 across BNPL borrowers and non-BNPL borrowers alike. In the Appendix, Figure 8 shows these amounts as an average share of total unsecured consumer debt for each of these BNPL borrower groups (heavy, occasional and no BNPL) and reveals that BNPL purchases comprise only two percent of total unsecured consumer debt even for heavy BNPL borrowers on average. This observation is due to the relatively low average monthly amounts of BNPL compared to student loans and credit card balances. Because these data do not contain all BNPL loans consumers may have, BNPL amounts and the share of BNPL in consumers' total unsecured debt portfolio represent lower bound estimates.

While BNPL purchases made up only two percent of heavy BNPL borrowers' total unsecured consumer debt on average in 2022, and one percent on average for the occasional BNPL borrower, BNPL constitutes a larger share of unsecured consumer debt for some consumers in the months in which they use it. As shown in the above sections, many BNPL borrowers move in and out of borrowing with BNPL.[26] They may have several loans one month and then zero in a later month. Table 10 homes in on BNPL borrower behavior in the months in which consumers borrow with BNPL and provides context to BNPL purchases during these periods.

[26] Appendix Figure 7 further shows that, on average, BNPL borrowers purchased $200 worth of merchandise on their first BNPL purchase, followed by an average of around $50 per month after first-time use.

FIGURE 6: AVERAGE MONTHLY DOLLAR AMOUNTS OF UNSECURED CONSUMER DEBT, BY BNPL BORROWER GROUP AND COMPONENT, 2022



Note: CCIP matched sample. Accounts are weighted according to whether they are joint or individual accounts. Balances reflect those opened within 45 days of each archive month for traditional loans and within the last 30 days for alternative financial services. The sample omits observations from one firm that did not provide sufficient information to match their BNPL records to credit records. Average monthly amounts have been CPI-adjusted to September 2024 dollars and include zeros for consumers with zero open balances, either because they did not borrow with the respective credit product that month or because their open balance was zero dollars.

On average, BNPL borrowers with a credit record held $22,163 in monthly unsecured consumer credit, of which $242 stemmed from BNPL purchases. The ratio of these two numbers yields the approximate one percent share of unsecured debt, calculated in Appendix Figure 8 and discussed further above. However, Table 10 shows that this share reaches 17 percent when calculated as a share at the consumer level, and subsequently averaged across consumers. This difference indicates that BNPL balances comprise a much higher share of total consumer debt burdens among BNPL borrowers with lower than median levels of non-BNPL credit. The youngest age group, consumers between 18 and 24, hold substantially lower levels of consumer debt, averaging around $9,000 monthly.[27] Consequently, BNPL comprises 28 percent of unsecured consumer debt for active BNPL borrowers in this age group on average when measured at the consumer level, and approximately seven percent for the median BNPL borrower between age 18-24 (not shown).

BNPL financing is particularly popular among young consumers aged 18-24 and aged 25-33, with around 37 percent and 34 percent, respectively, having financed at least one purchase in 2022 using BNPL. Consumers in the age range of 34-40 also had an above-average likelihood of borrowing with BNPL, at approximately 29 percent.

Consumers may be relying on BNPL when other credit is unavailable. Table 10 displays BNPL as a share of available non-BNPL credit from credit cards and personal loans. Overall, the total amount of merchandise purchased using BNPL is about 45 percent of BNPL borrowers' overall credit availability in the months in which they borrow using BNPL and around 60 percent among consumers aged 18-24.

TABLE 10: AVERAGE MONTHLY UNSECURED DEBT BY AGE GROUP, 2022

	Share of BNPL borrowers	Unsecured debt amount ($)	BNPL purchases among BNPL borrowers ($)	BNPL share of available credit among borrowers	BNPL share of unsecured debt among BNPL borrowers
Age 18-24	37.1%	9,068	202	59.5%	27.9%
Age 25-33	33.6%	20,486	242	46.9%	16.6%
Age 34-40	28.7%	25,425	267	43.7%	16.0%
Age 41-50	19.1%	28,991	260	40.1%	14.1%
Age 51-64	9.9%	26,453	231	33.2%	14.2%
Age 65+	5.9%	17,352	196	24.2%	15.5%
Average	21.2%	22,162	242	44.8%	17.3%

Note: Matched CCIP sample. Accounts are weighted according to whether they are joint or individual accounts. Balances reflect those opened within 45 days of each archive month for traditional loans and within the last 30 days for alternative financial services. Unsecured debt amounts, BNPL purchase amounts, BNPL share of available credit and BNPL share of unsecured debt are calculated at the consumer level before taking an average across consumers in each age group. Unsecured consumer debt encompasses student loans, credit cards, personal loans, BNPL and alternative financial services such as subprime installment and payday loans. Available credit is defined as all credit

[27] Appendix Figure 9 shows that this age group holds lower amounts of credit card debt than all other age groups and lower amounts of student loan debt compared to consumers aged 25-50.

card and personal loan limits less balances on those accounts. All numbers represent an average across months in 2022 for each age group in the given month. Amounts have been CPI adjusted to September 2024 dollars.

The preceding sections have shown heterogeneous usage patterns by age and credit score that are reflected in average consumer debt profiles of those groups. The following analysis takes a deeper look at conditional correlations of BNPL use and the amount of consumer debt held across different types of credit when controlling for age, credit score and seasonal variation in BNPL use. Table 11 shows the results of separate ordinary least squares regressions of an indicator for BNPL use in each month on the amount of open balances held in each type of non-BNPL financial product. Regressions are at the consumer-month level for all months in 2020-2022 and contain month-year fixed effects, as well as indicator variables for age and credit score category.

In an average month in which consumers finance at least one purchase using BNPL, they hold more unsecured consumer debt than consumers who did not use BNPL that month, in all non-BNPL categories of credit examined, even controlling for age, credit score and seasonal variation. For instance, BNPL borrowers have $871 more in open credit card balances, $5,734 more in student loans, $453 more in personal loans and $292 more in retail loans compared to their non-BNPL borrower counterparts. BNPL borrowers also have $0.37 more in payday balances on average and $29 dollars in other types of AFS credit, most of which are subprime installment loans. All of these differences are significant at a 99 percent level of confidence.

TABLE 11: CONDITIONAL CORRELATIONS BETWEEN BNPL USE AND NON-BNPL UNSECURED DEBT, 2020-2022

Outcome variable	Mean of variable	Coefficient	Standard Errors	Magnitude (percent of mean)	Obs.
Personal loan balances ($)	2,099	453.0***	31.6	21.6%	6,124,561
Retail loan balances ($)	791	291.5***	10.8	36.9%	6,124,561
Student loan balances ($)	15,800	5733.6***	201.4	36.3%	6,124,561
Credit card balances ($)	4,803	871.1***	41.4	18.1%	6,124,561
Payday balances ($)	0.66	0.37***	0.1	55.9%	6,124,561
Other AFS balances ($)	49	28.6***	2.0	58.6%	6,124,561

Note: Matched CCIP sample. Accounts are weighted according to whether they are joint or individual accounts. Balances reflect those opened within 45 days of each archive month for traditional loans and within the last 30 days for alternative financial services. Each balance type represents a separate regression of that outcome on having any amount of BNPL in the given month and controls for credit score bin, age and time (year-month fixed effects). Zero balances included. AFS=alternative financial services. Other AFS balances are primarily from subprime installment loans. Standard errors are clustered at the consumer level. *** indicates a p-value greater than 0.01.

The relationships shown in Table 11 should not be interpreted as causal. This report does not provide evidence that BNPL induces increases in any of the non-BNPL credit products examined. With the evidence currently available, it is equally plausible that increases in other types of credit or decreases in the share of available credit make it more likely for consumers to finance purchases using BNPL.[28] For illustration, we investigate credit card utilization rates in the months leading up to and following the first time we observe a consumer financing a purchase with BNPL, exhibited in Figure 7.

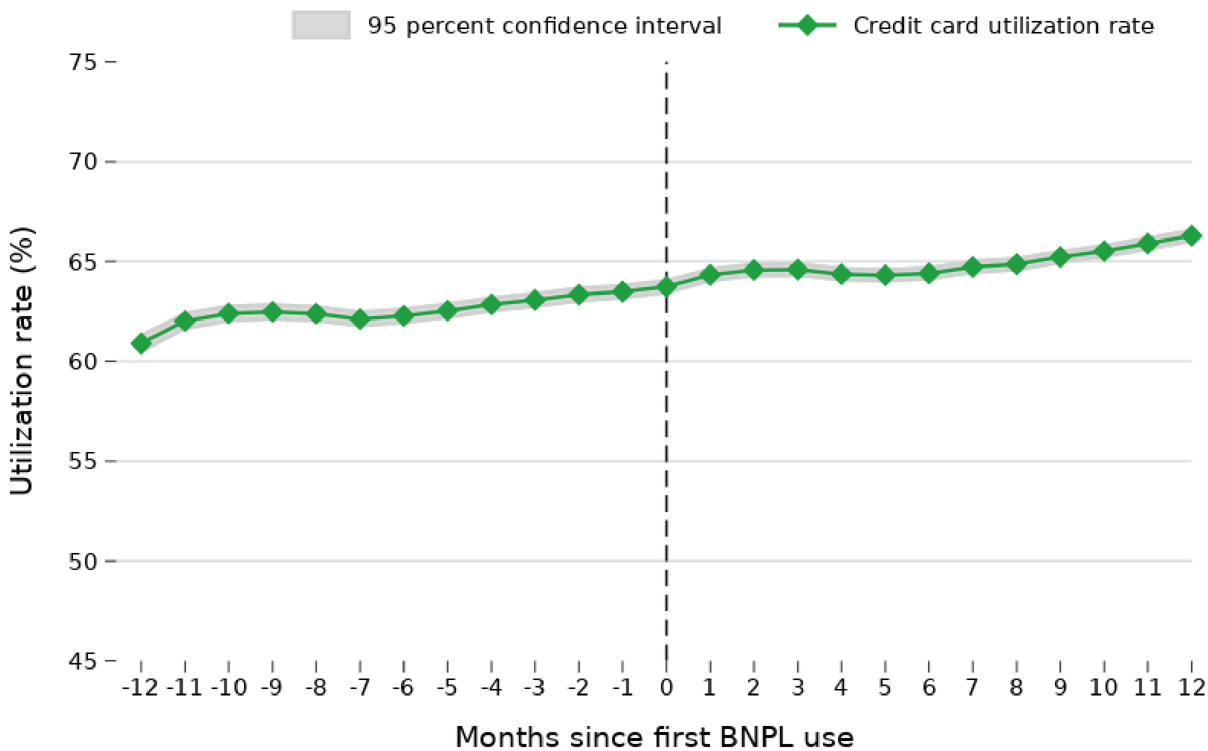
During the year leading up to first-time BNPL use, the average credit card utilization rate increases. Following first-time BNPL use, credit card utilization rates level off somewhat and then continue to increase, but at a lower rate than before first-time use. This pattern may indicate some substitution between BNPL and credit card use. We leave a more thorough examination of this question for future research.

In addition to the trend in the credit card utilization rate, the average rate among BNPL borrowers is notably high, between 60 and 66 percent. During the same time period from 2020-2023, the average utilization rate in our sample among consumers who we never observed using BNPL is 34 percent, with a median rate of 16 percent. Utilization rates above 30 percent may negatively impact consumers' credit scores such that higher rates often indicate financial vulnerability.[29] The median credit card utilization rate among consumers ever observed using BNPL in this same period is 70 percent. Appendix Figure 11 displays the 25th to 75th percentiles of credit card utilization rates from the time of first BNPL use and further shows that there is a large amount of heterogeneity in rates, with a fairly stable mean and median.

[28] We likewise cannot rule out an impact from other omitted variables that we do not observe.

[29] *See* "Credit score myths that might be holding you back from improving your credit," CFPB (January 2019), *available at* https://www.consumerfinance.gov/about-us/blog/credit-score-myths-might-be-holding-you-back-improving-your-credit/ (last visited December 15, 2024). We note that because this statistic contains both credit card revolvers (i.e. consumers who carry a balance and pay interest from month to month) and transactors, a high utilization rate in any given month does not necessarily indicate financial distress. However, persistently high rates may.

FIGURE 7: CREDIT CARD UTILIZATION RATE BEFORE AND AFTER FIRST-TIME BNPL USE



Note: Matched CCIP sample of BNPL borrowers who originated their first BNPL loan between 2020 and 2022. The sample omits observations from one firm that did not provide sufficient information to match BNPL records to the credit records. This omission may introduce some measurement error if a consumer's first-time use was with a firm omitted from this dataset. The grey shaded region represents a confidence interval of 95 percent around the mean. Credit card utilization is defined as the total balances on open credit cards divided by the total credit card limits on those cards. Stale accounts older than 45 days from the report date are excluded and accounts are weighted according to whether they are joint or individual accounts.

Conclusion

This report provides the first descriptive, consumer-level analysis of BNPL use leveraging linked BNPL applications and originations with credit records. Findings reveal that approximately 21 percent of consumers with a credit record financed at least one pay-in-four BNPL loan with one of the six BNPL firms (Affirm, Afterpay, Klarna, PayPal, Sezzle or Zip) in 2022, and that approximately 20 percent of these BNPL borrowers are heavy users, financing more than one purchase per month with BNPL. In addition, approximately 63 percent of borrowers in 2022 originated multiple simultaneous loans at some point during the year, and 33 percent did so across multiple firms. Low purchase amounts on average compared to credit cards and student loan balances show that BNPL composes only one percent of total annual unsecured consumer debt, on average. However, this low average share masks a great deal of heterogeneity. Young consumers and consumers with low or no credit score are more likely than average to choose BNPL. For instance, consumers in the age range of 18-24 are almost twice as likely (37 percent) to finance a purchase with BNPL, and for borrowers in this age group, BNPL purchases represent an average of 28 percent of total consumer financial debt in the months in which they borrow.

In this report, we find that, in an average month in which consumers finance at least one purchase using BNPL, they hold more non-BNPL unsecured consumer debt than consumers who did not use BNPL that month, in all non-BNPL categories of credit examined: credit cards, retail and personal loans, student loans and other types of alternative financial service loans. At the same time, we also document an increase in credit card utilization rates in the months preceding consumers' first-time BNPL use. The analysis in this report does not determine whether BNPL causally induces increases in non-BNPL consumer debt, or whether consumers increase their use of BNPL in response to decreases in available credit, or whether neither is the case. The importance of BNPL in the credit profiles of BNPL borrowers underlines the need for further research to understand how this growing financial product causally impacts borrowers' financial health.

APPENDIX A: ADDITIONAL TABLES AND FIGURES

TABLE 12: ORIGINATIONS AND APPROVAL RATE BY AGE COHORT, 2021-2022

	Raw Sample		Matched Sample	
Age Cohort	**Share of Originations**	**Approval Rate**	**Share of Originations**	**Approval Rate**
18-24	13.6%	69.1%	12.6%	69.3%
25-33	32.0%	77.8%	33.6%	76.5%
34-40	21.2%	80.4%	20.2%	78.7%
41-50	20.3%	82.2%	21.6%	81.4%
51-64	11.7%	83.7%	11.3%	81.6%
65+	1.4%	82.7%	0.8%	79.7%
Observations	*77,809,860*	*115,429,204*	*1,060,310*	*1,603,285*

Note: These statistics omit consumers for whom age information was missing in the dataset. The raw, unmatched sample uses consumer-reported age information at the time of application. The matched sample uses the date of birth in the consumer's credit record. Shares of originations may not sum to exactly 100 percent due to rounding to one digit after the decimal point.

TABLE 13: ORIGINATIONS AND DEFAULT RATE BY FICO CATEGORY, 2022

	Share of Originations		Default Rate	
	Heavy Users	**Occasional Users**	**Heavy Users**	**Occasional Users**
No Score	3.6%	5.2%	1.1%	6.2%
Deep Subprime	46.8%	33.5%	2.1%	6.8%
Subprime	17.6%	13.8%	0.6%	2.7%
Near-prime	12.7%	14.7%	0.3%	1.5%
Prime	12.1%	17.8%	0.4%	0.9%
Super-prime	7.2%	14.9%	0.2%	0.7%
Observations	*11,291*	*44,384*	*11,291*	*44,384*

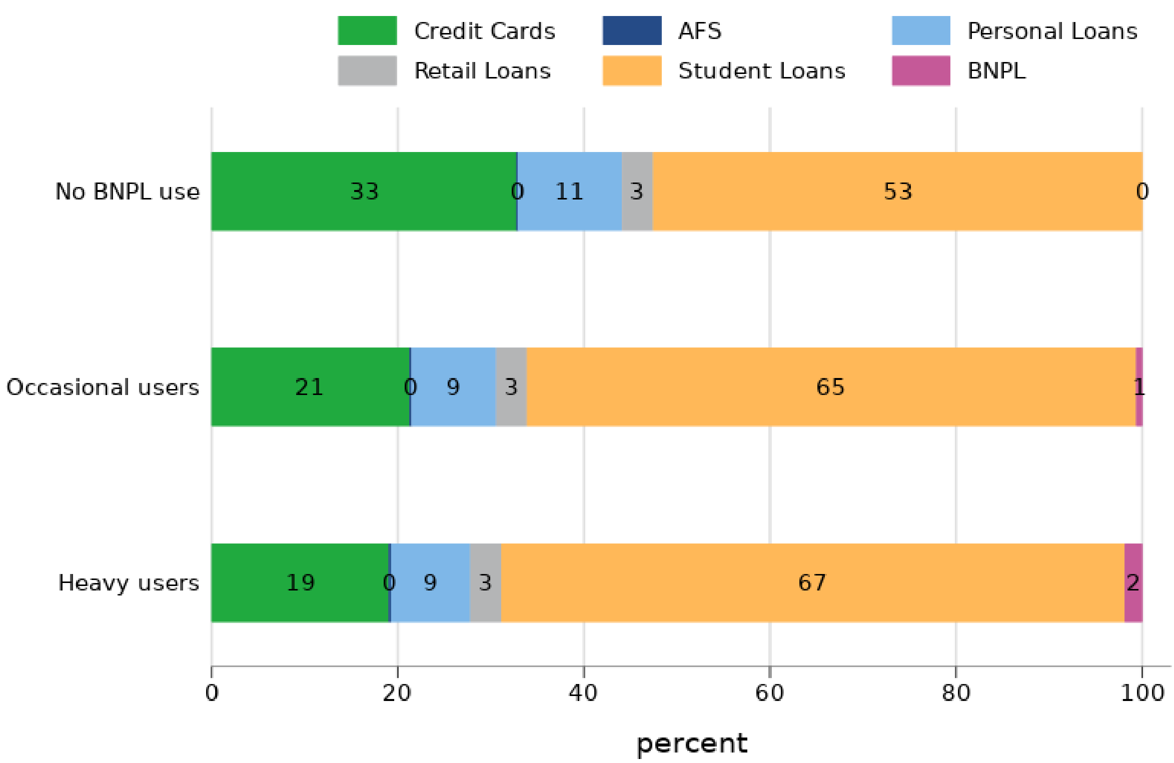
Note: Matched CCIP sample of BNPL borrowers who originated a BNPL loan in 2022. Shares of originations may not sum to exactly 100 percent due to rounding to one digit after the decimal point. Default rates are calculated as a share of originations in each FICO category reported as 120+ days past due. FICO score categories are defined as 300-579 for deep subprime, 580-619 for subprime, 620-659 for near prime, 660-719 for prime, and 720-850 for super-prime.

TABLE 14: SHARE OF CREDIT AMOUNT CHARGED OFF, AMONG BNPL BORROWERS

Year	BNPL percent charged off	Credit card percent charged off
2020	1.9%	15.5%
2021	2.2%	14.3%
2022	1.4%	10.9%

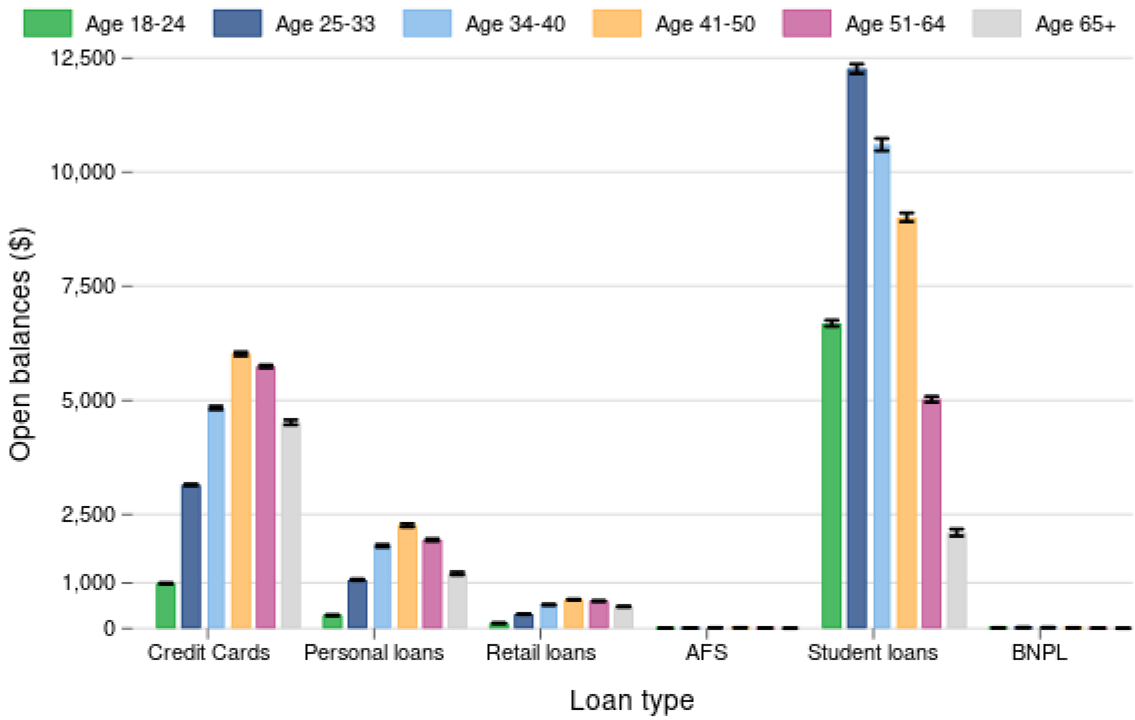
Note: Subsample of BNPL borrowers in the CCIP matched sample. The table shows the share of total open credit amounts on each product that was charged off among BNPL borrowers in the given year.

FIGURE 8: PERCENT OF UNSECURED CONSUMER DEBT PROFILE, BY BNPL USER TYPE IN 2022



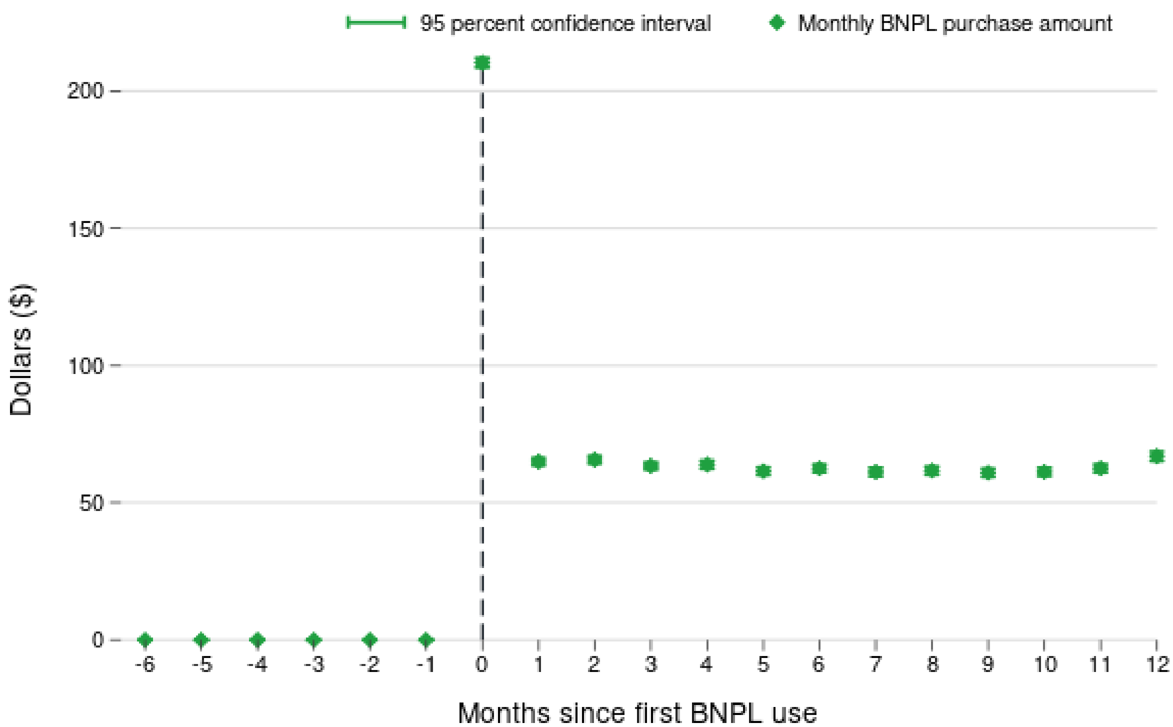
Note: CCIP matched sample. Percents shown are an average across all consumers in the given BNPL user group. Zero balances are included. Numbers are rounded to the nearest percent. AFS = alternative financial services defined as non-traditional consumer loans from subprime lenders.

FIGURE 9: AVERAGE MONTHLY DOLLAR AMOUNTS OF UNSECURED CONSUMER DEBT, BY AGE GROUP AND COMPONENT, 2022



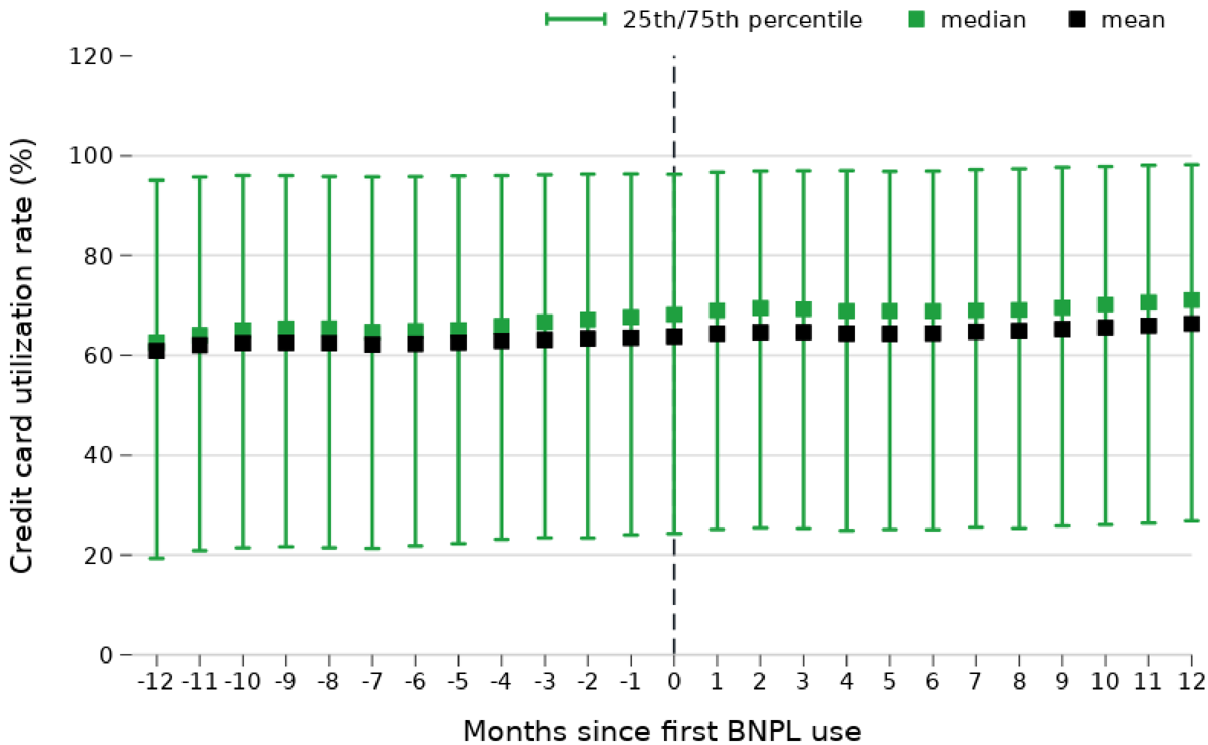
Note: CCIP matched sample. Amounts have been CPI-adjusted to September 2024 dollars. Zero balances included.

FIGURE 10: AVERAGE AMOUNT OF BNPL PURCHASES IN THE MONTHS BEFORE AND AFTER FIRST-TIME USE



Note: CCIP matched sample. Amounts have been CPI-adjusted to September 2024 dollars. Zero balances included. First time BNPL use is defined among the five firms that provided sufficient information to match consumers to the credit records.

FIGURE 11: CREDIT CARD UTILIZATION RATE DISTRIBUTION AROUND THE MONTH OF FIRST-TIME BNPL USE



Note: CCIP matched sample. Amounts have been CPI-adjusted to September 2024 dollars. Zero balances included. First time BNPL use is defined among the five firms that provided sufficient information to match consumers to the credit records.