

# Buy Now, Pay Later: Market trends and consumer impacts

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# 1. Executive Summary

Consumers have long used credit instruments to purchase goods and services. In recent years, a fast-growing alternative to credit cards has emerged in a number of developed economies around the world, including in the United States. This alternative is marketed as “Buy Now, Pay Later” (BNPL).

BNPL is a form of credit that allows a consumer to split a retail transaction into smaller, interest-free installments and repay over time.<sup>1</sup> The typical BNPL structure divides a \$50 to \$1,000 purchase into four equal installments, with the first installment paid as a down payment due at checkout, and the next three due in two-week intervals over six weeks. When a borrower does not make these payments, many BNPL lenders charge late fees, often around \$7 per missed payment on an average loan size of \$135.

In December 2021, the Consumer Financial Protection Bureau (CFPB) issued market monitoring orders to five lenders to provide data on their BNPL loans.<sup>2</sup> This market report summarizes that data, individual and organizational submissions to the CFPB, and publicly available sources to provide a review of BNPL’s marketplace importance and consumer impacts in the United States.<sup>3</sup>

Important metrics from the report include:

- The BNPL industry is in the midst of rapid growth. From 2019 to 2021, the number of BNPL loans originated in the U.S. by the five lenders surveyed grew by 970 percent, from 16.8 to 180 million, while the dollar volume of those originations (commonly referred to as Gross Merchandise Volume, or GMV) grew by 1,092 percent, from \$2 billion to \$24.2 billion.
- The industry mix of BNPL usage is diversifying. Apparel and beauty merchants, who had combined to account for 80.1 percent of originations in 2019, only accounted for 58.6 percent in 2021.

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<sup>1</sup> In general, this report uses the term “borrower” to refer to a BNPL customer who has completed the process of taking out a BNPL loan, and the terms “user” or “applicant” to refer to a BNPL customer who is browsing the platform or is in the middle of a credit application that is not yet complete. It will also use the term “consumer” when referring to general instances of individuals that may expand beyond the scope of BNPL.

<sup>2</sup> Consumer Financial Protection Bureau, *Consumer Financial Protection Bureau Opens Inquiry into ‘Buy Now, Pay Later’ Credit* (December 16, 2021), available at <https://www.consumerfinance.gov/about-us/newsroom/consumer-financial-protection-bureau-opens-inquiry-into-buy-now-pay-later-credit>

<sup>3</sup> This report was prepared by Martin Kleinbard, Jack Sollows, and Laura Udis, Office of Markets.

- 73 percent of applicants were approved for credit in 2021, up from 69 percent in 2020.
- The average individual order value (*i.e.*, average purchase amount financed by a BNPL loan) in 2021 was \$135, up from \$121 in 2020.
- 10.5 percent of borrowers were charged at least one late fee in 2021, up from 7.8 percent in 2020.
- 13.7 percent of individual loans in 2021 had at least some portion of the order that was returned, up from 12.2 percent in 2020.
- 3.8 percent of borrowers had a loan that was charged off in 2021, up from 2.9 percent in 2020.<sup>4</sup>

The report identifies several competitive benefits of BNPL loans over legacy credit products. These benefits are both financial (*i.e.*, no interest and sometimes no late fees) and operational (*i.e.*, ubiquitous, easy to access, simple repayment structure).

The report also identifies several potential consumer risks, which fit into the three broad areas of concern noted in the CFPB’s December 2021 market monitoring orders:<sup>5</sup>

- **Discrete consumer harms.** The BNPL product is often structured in ways that may present borrowers with undesirable operational hurdles, including the lack of clear disclosures of loan terms, challenges in filing and resolving disputes, and a requirement to use autopay for all loan payments.
- **Data harvesting.** Similar to many other large tech platforms, BNPL lenders often collect consumer data—and deploy models, product features, and marketing campaigns based on that data—to increase the likelihood of incremental sales and maximize the lifetime value it can extract from each current, past, or potential borrower. These practices (which may become even more prevalent and profitable as third-party data tracking becomes more difficult on iOS<sup>6</sup> and Android<sup>7</sup> operating systems) may

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<sup>4</sup> Each lender has a slightly different definition of charge off, but at a high level this metric should be thought of as the percent of borrowers who had a portion of their loan balance that was considered “uncollectable” after significant time and collection efforts.

<sup>5</sup> CFPB Opens Inquiry into ‘Buy Now, Pay Later’ Credit

<sup>6</sup> National Public Radio, *Apple Rolls Out Major New Privacy Protections For iPhones And iPads* (April 26, 2021), available at <https://www.npr.org/2021/04/26/990943261/apple-rolls-out-major-new-privacy-protections-for-iphones-and-ipads>

<sup>7</sup> Google, *Introducing the Privacy Sandbox on Android* (February 16, 2022), available at <https://blog.google/products/android/introducing-privacy-sandbox-android/>

compromise consumers' privacy and autonomy and contribute to the overextension risks described below.

- **Overextension.** The BNPL business model may encourage overextension, and in doing so present a pair of risks: loan stacking, which can cause borrowers to take out several loans within a short time frame at simultaneous lenders; and sustained usage, in which frequent BNPL consumption over a period of months and years may affect consumers' ability to meet non-BNPL obligations.

# 2. Introduction

## 2.1 Product Definition

There is no single definition of “Buy Now, Pay Later” (BNPL). For purposes of this report, the Consumer Financial Protection Bureau (CFPB) defines BNPL as the “pay-in-four” or “split pay” product: a four-installment, no-interest consumer loan, typically with a down payment of 25 percent and the remaining three installments due in two-week intervals.

This report excludes other forms of short-term purchase financing, including:

- **Point-of-Sale (POS) installment loans:** A consumer installment loan tied to a specific purchase, with monthly payments that may include interest or fixed finance charges. Unlike the pay-in-four product, the POS installment loan is usually intended for large, infrequent purchases (*i.e.*, furniture and high-priced exercise equipment), with term lengths up to three or four years. Down payments are typically not required.
- **Post-purchase credit card installment plans:** A product enhancement that many credit card issuers have added in recent years that allows cardholders to repay a previously purchased item on a payment plan in fixed monthly installments. While the plan often includes amortized interest or fixed finance charges, it is separate from the borrower’s credit card account balance and does not incur revolving interest.

## 2.2 Background

BNPL rose to prominence in the mid-2010s as an alternative form of short-term credit for online retail purchases. Combining the digital point-of-purchase ubiquity of credit cards, the simple repayment terms of traditional installment loans, and the general appeal of no interest charges, BNPL was able to gain traction with consumers who enjoyed the ease of ecommerce and the flexibility of being able to pay for goods and services over time but who may have been leery of more traditional forms of debt.

Other similarities between BNPL and traditional credit cards include: a product that merges payments and credit, an assigned credit amount that may replenish as the borrower makes payments on outstanding loans, a business model that includes transaction fees charged to merchants, and a high frequency of usage for retail purchases.

However, despite its rapid growth, the BNPL industry is less transparent than legacy credit products, stemming from relatively sparse public data and the lack of BNPL loan repayment furnishing to the Nationwide Consumer Reporting Companies (NCRCs).

In December 2021, the CFPB utilized section 1022(c)(4)(B)(ii) of the Dodd-Frank Wall Street Reform and Consumer Protection Act<sup>8</sup> to issue market monitoring orders requesting data from five of the firms that offer BNPL loans in the U.S.: Affirm, Afterpay, Klarna, PayPal, and Zip (formerly Quadpay in the U.S.).<sup>9</sup> The orders consisted of a detailed set of qualitative and quantitative questions designed to provide an in-depth view of the lenders' U.S. BNPL-specific businesses from 2019 through 2021.<sup>10</sup> Topics included loan volumes (split by merchant industry, or vertical), revenue and expense figures, and strategies and policies on underwriting, repayment, late fees, and product disputes.<sup>11</sup>

The data and insights derived from these orders form the foundation of this report. The report is supplemented by:

- Submissions to the CFPB via a BNPL-specific public request for comment that concluded in March 2022,<sup>12</sup> along with depersonalized complaints filed with the CFPB's Consumer Complaint Database.<sup>13</sup>
- Publicly available source materials, including financial filings, earnings calls, research papers, and media interviews with BNPL lenders, vendors, and clients.

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<sup>8</sup> 12 U.S.C. 5512.

<sup>9</sup> *CFPB Opens Inquiry into 'Buy Now, Pay Later' Credit.* The CFPB has also published two blogs that alerted consumers of the general risks of taking out a BNPL loan: <https://www.consumerfinance.gov/about-us/blog/should-you-buy-now-and-pay-later/> and <https://www.consumerfinance.gov/about-us/blog/know-before-you-buy-now-pay-later-this-holiday-season/>

<sup>10</sup> While some of the lenders surveyed have domestic non-BNPL business products and/or conduct business outside of the United States, these market monitoring orders were confined to BNPL (*i.e.*, "pay-in-four" only) in the US.

<sup>11</sup> Consumer Financial Protection Bureau, *Order to File Information* (December 16, 2021), available at [https://files.consumerfinance.gov/f/documents/cfpb\\_bnpl\\_sample-order\\_2021-12.pdf](https://files.consumerfinance.gov/f/documents/cfpb_bnpl_sample-order_2021-12.pdf)

<sup>12</sup> This public request for comment yielded 40 unique submissions: 13 were filed by consumer advocacy groups, and 12 were filed by trade associations (8 representing banks or credit unions, 2 representing retailers, and 2 representing financial technology firms). The remaining 15 submissions were from private entities (8), governmental agencies (3), academics (2), individuals (1), and an unknown (1) source.

Consumer Financial Protection Bureau, *Notice and Request for Comment Regarding the CFPB's Inquiry Into Buy-Now-Pay-Later (BNPL) Providers* (January 24, 2022), available at <https://www.consumerfinance.gov/rules-policy/notice-opportunities-comment/open-notices/notice-and-request-for-comment-regarding-cfpbs-inquiry-into-bnpl-providers>

<sup>13</sup> Consumer Financial Protection Bureau, *Consumer Complaint Database*, available at <https://www.consumerfinance.gov/data-research/consumer-complaints>

While this report provides one of the most thorough quantitative and qualitative reviews of BNPL in the U.S. to date, it has limitations.

First, there are limitations of scope. As described at the outset of this report, the CFPB limited its review to the pay-in-four product. Within that product definition, this report is primarily focused on “pure-players:” nonbank tech companies that offer BNPL, although they may also offer other forms of point-of-sale lending.

Second, there are limitations of depth. The quantitative data received from the market monitoring orders was provided in an aggregated (or “rolled up”) form rather than on an individual loan level. As a result, the credit performance of individual borrowers across lenders (*i.e.*, those with concurrent BNPL loans from different lenders) or over time (either on their BNPL products specifically or on their overall credit profiles, debt burdens, and savings levels) cannot be assessed from the data collected. There is also no way to evaluate the structural soundness of the lenders’ credit models. Lastly, the only available demographic that the lenders collect and provided was age.<sup>14</sup> In addition, we cannot measure the impact of BNPL payments on borrowers’ checking accounts, including non-sufficient funds or overdraft fees, or on borrowers’ capacity to repay other expenses or obligations.

Third, there are limitations of extrapolation. While, on a proportional basis, the data is likely representative of the “pure-play” BNPL industry as a whole, the market monitoring orders only covered the five lenders surveyed. As a result, the data cannot be used to definitively project the overall size of the U.S. BNPL market. This report intentionally omits secondary-source market sizings, as those are directional estimates from incomplete sources that often include POS loans or other non-pay-in-four credit products.

## 2.3 Summary of Report and Findings

The body of the report is divided into three sections.

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<sup>14</sup> The lenders surveyed do not directly collect information on the racial and gender breakdown of their borrower base, so the report does not include those demographics. However, a recent survey by the Federal Reserve Bank of Philadelphia found a virtual 50-50 split between male and female users, and a 70-30 split between White and Non-White users. According to the U.S. Census Bureau’s most recent estimates, 75.8 percent of the overall population is White.

Federal Reserve Bank of Philadelphia, *Buy Now, Pay Later: Survey Evidence of Consumer Adoption and Attitudes* (June 17, 2022), available at <https://www.philadelphiahfed.org/consumer-finance/consumer-credit/buy-now-pay-later-survey-evidence-of-consumer-adoption-and-attitudes>.

United States Census Bureau, *Quick Facts* (July 1, 2021), available at <https://www.census.gov/quickfacts/fact/table/US/PST045221>.

Section 3 (“Consumer Metrics”) explores BNPL from the perspective of the borrower, starting at the point of “acquisition” (*i.e.*, the initial interaction between potential borrower and BNPL lender), continuing to the application and underwriting processes, and concluding with the policies and procedures around account management and loan repayment.

Key findings in that section from the data collected from the market monitoring orders include:<sup>15</sup>

- 73 percent of applicants were approved for credit in 2021, up from 69 percent in 2020.
- The average individual order value (*i.e.*, average purchase amount financed by a BNPL loan) in 2021 was \$135, up from \$121 in 2020.
- 89 percent of loan repayments were made on a debit card in 2021, virtually unchanged from each of the previous two years.
- 10.5 percent of borrowers were charged at least one late fee in 2021, up from 7.9 percent in 2020.
- Lenders’ share of revenues from consumer fees (late fees and other fees) was 13.4 percent in 2021, up from 11.7 percent in 2020. Late fees specifically accounted for 6.9 percent of revenues in 2021 (up from 4.8 percent in 2020).
- 13.7 percent of individual loans in 2021 involved a purchase that was returned or disputed, up from 12.2 percent in 2020.
- 3.8 percent of borrowers had a loan that was charged off in 2021,<sup>16</sup> up from 2.9 percent in 2020.

Section 4 (“Market Metrics and Trends”) explores the BNPL industry from the perspective of the lenders. The section is divided into three subsections covering top-line origination volumes, unit margins (*i.e.*, the variable revenues earned and expenses incurred on each loan originated), and general business trends. Key findings from this section include the following:

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<sup>15</sup> Unless otherwise noted, all quantitative figures and metrics are derived solely from the responses from the five lenders surveyed as part of the December 2021 market monitoring orders. All metrics cited from the market monitoring orders are calculated as loan-level averages: loans are summed between the five lenders, not averaged from the individual metrics of each lender.

<sup>16</sup> Each lender has a slightly different definition of charge off, but at a high level this metric should be thought of as the percent of borrowers who had a portion of their loan balance that was considered “uncollectable” after significant time and collection efforts. There are accounting and tax impacts on lenders when a loan charges off and the specifics of those impacts are out of scope of this report.

- The five lenders surveyed originated \$24.2 billion in BNPL loans in 2021 (commonly referred to as Gross Merchandise Volume, or GMV), nearly triple the \$8.3 billion originated in 2020 and more than twelve times the \$2 billion originated in 2019.
- The Apparel and Beauty industries combined to make up 58.6 percent of originations in 2021, down from 69.9 percent in 2020 and 80.1 percent in 2019.
- BNPL usage for “everyday” or “necessity” purchases (gas, groceries, and utilities) was \$229.2 million in 2021 (0.9 percent of GMV), up 434 percent from \$42.9 million in 2020, which itself was up 1,207 percent from \$3.3 million in 2019.
- Unit margins (unit revenues less unit expenses) were 1.01 percent of GMV in 2021, down from 1.27 percent in 2020. This reduction in margins stemmed from two sources: a decrease in revenues from merchant discount fees (fees merchants paid to BNPL lenders), and an increase in credit losses. An additional pressure point on lenders’ unit margins arose in the first half of 2022: increasing funding costs, stemming from a combination of idiosyncratic and macroeconomic conditions.
- In response to these pressures on unit margins, BNPL lenders have adjusted their business models and strategies in a variety of ways, including tightening underwriting, increasing their reliance on consumer fees (namely, late fees and other fees), and shifting toward the app-driven “lead generation” acquisition model.<sup>17</sup> The latter adjustment has the potential for the most far-reaching consumer impact, as it strengthens the breadth and depth of the lender’s relationship with the borrower, and thus increases the likelihood of habitual BNPL usage.

Section 5 (“BNPL and Consumer Financial Health”) explores the relationship between BNPL usage and borrowers’ short- and long-term financial health. The section describes BNPL’s benefits and risks as inextricably linked to the same “free and seamless” business model employed by many of the Internet’s largest tech companies: an interest-free, accessible-at-your-fingertips product that entices incremental spending. The financial and operational benefits over legacy credit products are real and sizeable. Those same benefits, however, may lead to two forms of borrower overextension: loan stacking (the risk of overconsumption from BNPL usage at multiple concurrent lenders) and sustained usage (the risk of long-term BNPL usage causing stress on borrowers’ ability to meet other, non-BNPL financial obligations).

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<sup>17</sup> As will be noted in that section, not every lender surveyed employed all three of these strategic adjustments.

Section 6 (“Takeaways and Risks”) concludes the report with takeaways from the prior sections and an enumeration of BNPL’s largest consumer risks: discrete harms, data harvesting, and overextension.

# 3. Consumer Metrics

## 3.1 Customer Acquisition

BNPL lenders implement two distinct strategies for acquiring their users. In the **merchant partner acquisition model**, lenders sign contracts with specific online retailers to embed their product on the retailers' checkout pages. Consumers shopping on those retailers' websites and apps see the opportunity to split their purchase into four equal, interest-free installments—a service provided by the BNPL lender.

The images on the following page describe a typical BNPL merchant partner model checkout flow.<sup>18</sup> In Image 3.1.1, a consumer shopping on a jewelry merchant's product page is shown a visual cue that BNPL financing is available for the particular item, with a link to a pop-up message that provides more details (see Image 3.1.2). In Image 3.1.3, the consumer has reached the point of checkout with that item in their cart and is presented with several payment options, including the BNPL lender referenced in the prior two images. In Image 3.1.4, the consumer is presented with the schedule of potential BNPL payments. If the consumer clicks "Place Order," they are taken to another screen to enter their personal information and payment details to complete the application for credit, which doubles as the checkout page. If the consumer is approved for credit and their down payment is processed, their BNPL loan begins.

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<sup>18</sup> Raven + Lily, *Ellsworth Studs XL* (2022), available at <https://ravenandlily.com/products/ellsworth-studs-xl-brass>

**Image 3.1.1**

Ellsworth Studs XL  
\$65.00  
4 interest-free payments of \$16.25 with BNPL LENDER

Color: Brass  
Quantity: 1 ADD TO CART

Share this: [f](#) [t](#) [in](#) [o](#)

Unexpected and modern, these statement studs were inspired by the Ellsworth Kelly light installation in our hometown, Austin. Geometric and bold, the Ellsworth Studs exude confidence.

**Image 3.1.2**

ORDERS FOR A LIMITED TIME

**4 interest-free payments of \$16.25**

Buy what you love and split the cost. It's easy and interest-free.

- Add item(s) to your cart
- Go to checkout and choose BNPL LENDER
- Enter your debit or credit card information
- Your first payment is taken when the order is processed and the remaining 3 are automatically taken every two weeks

See payment terms & legal fine print for more information.

**Close**

**Image 3.1.3**

Credit card

**shop Pay** Pay in full or in 4 installments

**PayPal**

**amazon pay**

Buy now, pay later with BNPL LENDER

After clicking "Complete order", you will be redirected to Buy now pay later with BNPL to complete your purchase securely.

**Image 3.1.4**

4 interest-free payments of \$17.98

\$17.98	\$17.99	\$17.99	\$17.99
Today	In 2 weeks	In 4 weeks	In 6 weeks

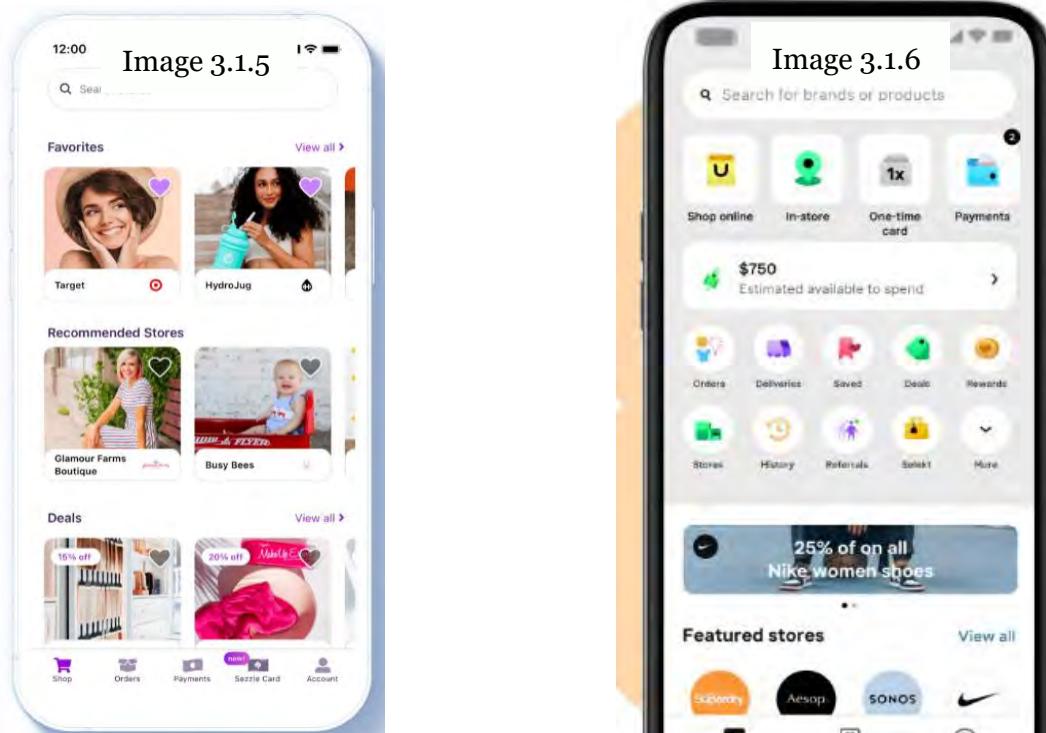
Trusted by over 20 million Americans.

By continuing, I accept [Shipping Services](#) [Privacy Policy](#) [Pay Later in 4 terms and conditions](#) [I accept all BNPL terms and conditions](#).

**Place Order**

Screenshots of the merchant partner acquisition model, showing information on BNPL on the product detail pages (Images 3.1.1. and 3.1.2), and the availability of BNPL next to other payment options at the point of checkout (Images 3.1.3 and 3.1.4).

While BNPL lenders acquire the majority of their users via the merchant partner model described above, many are rapidly shifting toward a model of direct consumer engagement. In this **app-driven acquisition model**, consumers preemptively complete the credit application process with the BNPL lender on its proprietary app. Once approved, consumers receive access to a virtual shopping mall of merchants to patronize (see image 3.1.5 below),<sup>19</sup> along with a purported credit amount provided by the lender (see the \$750 “Estimated available to spend” noted in Image 3.1.6 below, and a full explanation of the credit assignment strategy in Section 3.2.2).<sup>20</sup>



Screenshots of the app-driven acquisition model, in which users directly interact with the BNPL lender via its proprietary app. After earning credit approval, users are presented with a catalog of brands at which they can shop and check out via BNPL (Image 3.1.5), along with a spending limit provided by the lender (see the \$750 “Estimated available to spend” in Image 3.1.6).

<sup>19</sup> Sezzle, App (2022), available at <https://sezzle.com/app>.

<sup>20</sup> Klarna, Pay in 4 (2022), available at <https://www.klarna.com/us/pay-in-4/>.

See Section 3.2 for a more detailed explanation of BNPL lenders’ credit assignment naming conventions, strategies, and practices.

The underlying technology powering the app-driven acquisition model is a single-use, bank-issued virtual card that an approved applicant uses to complete a BNPL loan.<sup>21</sup> The virtual card technology provides BNPL lenders with two important benefits. First, it allows nearly any merchant who engages in ecommerce to accept BNPL—even if the merchant has not signed a specific contract with the BNPL lender.<sup>22</sup> This group of merchants are referred to as “non-partnered merchants,” as they facilitate BNPL loans without a specific integrated partnership with the lender who originated the BNPL loan. Second, it allows lenders to share in a portion of the interchange fees that are collected from the virtual card transaction. This additional revenue stream will be discussed more thoroughly in Section 4.

More generally, the app-driven model strengthens the consumer’s relationship with the BNPL lender by driving the consumer to begin (and often end) their purchase journey within the lender’s self-contained app ecosystem. This tightening of BNPL lenders’ brand awareness and loyalty has several downstream impacts on lenders’ financial incentives and consumers’ interactions with the product, which are explored in further detail in Section 4.

## 3.2 Application Flow/Underwriting

### 3.2.1 Underwriting strategy

In the merchant partner acquisition model, the credit application typically occurs at the merchant’s point of checkout—after the consumer has selected their item(s) to purchase. In the app-driven acquisition model, consumers often begin the underwriting process immediately upon logging into the BNPL app—before selecting their desired merchant or item(s).

In both acquisition models, the application process is seamless, streamlined, and brief to reduce friction and shopping cart abandonment.

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<sup>21</sup> An unaffiliated bank issues the virtual card but the BNPL lender holds the balance sheet risk of the credit transaction in the same manner that it does for a BNPL loan originated under the merchant partner model. The relationship with the issuing bank is governed by the issuer processor, a tech platform who is responsible for the front- and back-end code that generates the virtual card. The issuer processor coordinates the transaction and settles the interchange fees amongst the four parties involved: the fintech client (in this case, the BNPL lender), issuing bank, payment network, and issuer processor itself. An important technical feature of the virtual card is its flexibility: the BNPL lender client can specify the time horizon, dollar amount, and merchants that are eligible for use. The consumer is not responsible for any amount on the virtual card that remains unspent after it expires.

<sup>22</sup> In fact, the merchant may not even know in advance if a customer is checking out with their own credit or debit card or with a BNPL-issued single-use virtual card. In both cases, the user executes the transaction in the standard credit card checkout flow, rather than in a checkout flow built especially for BNPL as is the case in the merchant partner model.

The list of information required from the applicant is short. BNPL applicants are typically asked for their name, address, phone number, email address and date of birth. Some lenders request the last four digits of applicants' Social Security Number (SSN).

Four of the five lenders surveyed use consumers' credit profiles and credit scores, obtained from one or more NCRCs, as part of their process of underwriting new and returning applicants.<sup>23</sup> Three of those four lenders rely on credit profile and/or score data as part of their general underwriting strategy, while the fourth only uses it when an applicant has insufficient prior history with the lender. For returning BNPL borrowers, all five lenders surveyed supplement the credit approval decision with the applicants' prior repayment history with that lender.<sup>24</sup>

Lenders often use additional data sources and strategies to underwrite higher risk segments (*i.e.*, first-time applicants with low credit scores or scant credit history). At least one lender requires some applicants to verify the funds in their checking account via third-party "open banking" platforms, while at least one other lender requires some applicants to pay more than the customary 25 percent down payment (thus reducing the amount of credit extended).

In the CFPB's Request for Comments on BNPL, some commenters criticized the absence of traditional "ability to pay" calculations from most BNPL lenders' underwriting processes, in part because that calculation should consider applicants' other debt obligations in the context of their income and assets and identify where an applicant may not have sufficient residual income to make the BNPL payments.<sup>25</sup>

In 2021, the credit approval rate across the five lenders surveyed was 73 percent, up from 69 percent in 2020 but in line with the 74 percent from 2019.<sup>26</sup>

Table 1 on the following page depicts the credit approval rates across the five lenders surveyed from 2019 through 2021, by age cohort. Over time, the approval rates have become more tightly rank-ordered by cohort (*i.e.*, older age cohorts tend to have higher approval rates).

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<sup>23</sup> The standard practice for the BNPL lenders who do obtain a credit report and/or score as part of its underwriting is to receive this data via a "soft pull" that is not visible to other lenders and does not impact a consumer's credit report or scores. Consumer Financial Protection Bureau, *What's a credit inquiry?* (September 4, 2020), available at <https://www.consumerfinance.gov/ask-cfpb/whats-a-credit-inquiry-en-1317>

<sup>24</sup> BNPL lenders who also offer non-BNPL products may incorporate payment history on those non-BNPL products into their BNPL underwriting.

<sup>25</sup> Comment from State Attorneys General of IL, CA, CO, CT, DE, HI (AG & OCP), IA, ME, MD, MA, MI, NV, NJ, NY, NC, OR, PA, RI, VT, WA (March 25, 2022), available at <https://www.regulations.gov/comment/CFPB-2022-0002-0025>

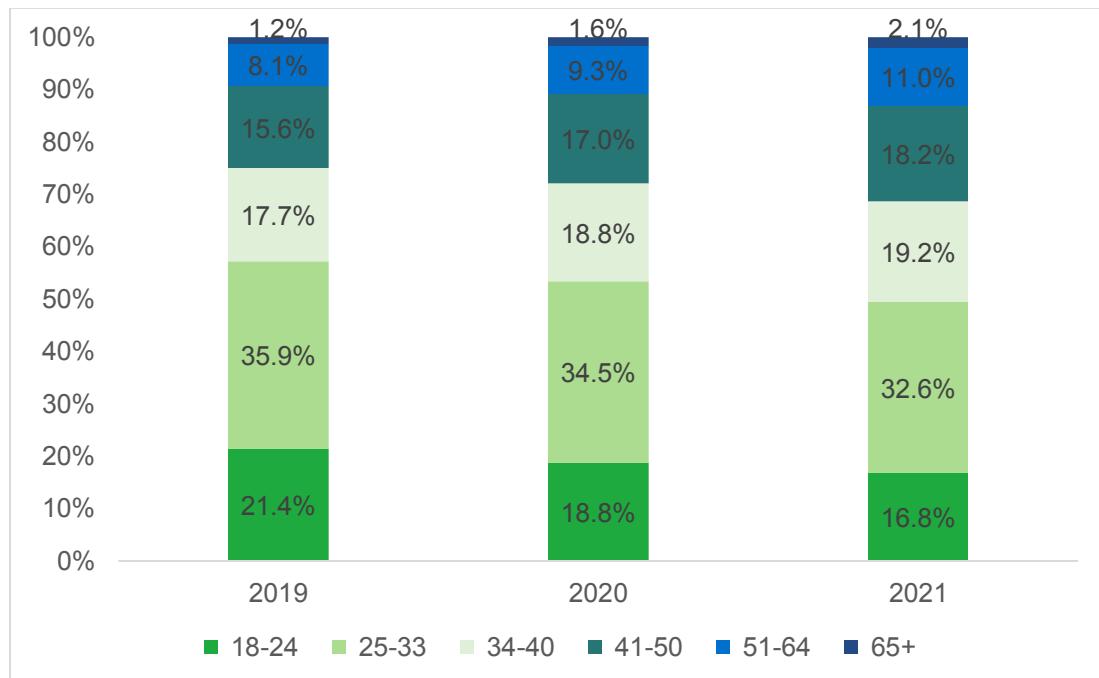
<sup>26</sup> The term "approval rate" is defined the number of unique BNPL users approved for credit divided by the sum of the unique borrowers and unique applicants declined for credit in the given time period studied.

**TABLE 1: CREDIT APPROVAL RATE BY AGE COHORT, 2019-2021**

Age Cohort	2019	2020	2021
18-24	73%	67%	69%
25-33	72%	68%	72%
34-40	73%	68%	73%
41-50	76%	71%	75%
51-64	79%	74%	77%
65+	74%	72%	76%

Figure 1 shows the share of unique BNPL borrowers by age cohort for 2019, 2020, and 2021.

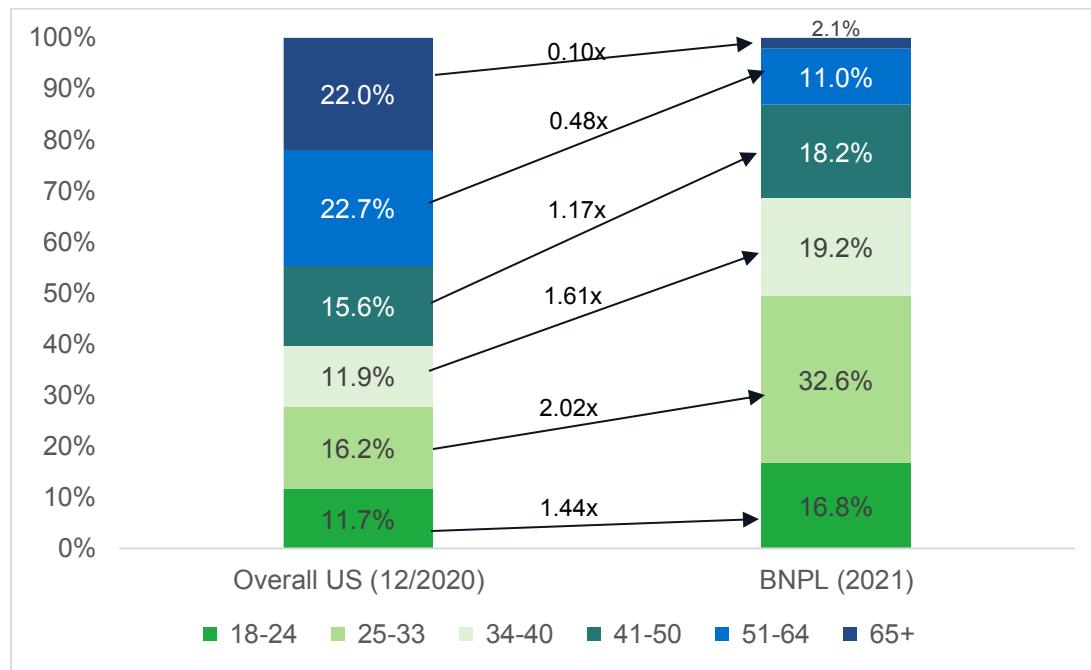
**FIGURE 1: SHARE OF UNIQUE BNPL BORROWERS BY AGE COHORT, 2019-2021**



In each of the three years surveyed, approximately half of the borrower base was 33 years old or younger. The youngest cohort (ages 18–24) accounted for 16.8 percent of the borrower base in 2021, down from 18.8 percent in 2020 and 21.4 percent in 2019. In 2021, among the five lenders surveyed, the 18-24 cohort's share of the overall borrower base ranged from 12.1 percent to 19 percent.

Figure 2 below juxtaposes each age cohort's share of the 18+ US population<sup>27</sup> (left bar) against its share of the 2021 BNPL borrower base (right bar), with the middle numbers inside the arrows representing the “index ratio:” the degree to which each cohort’s presence in BNPL is over- or under-indexed relative to its share of the general population.

**FIGURE 2: SHARE OF UNIQUE BNPL BORROWERS BY AGE COHORT (2021) VS OVERALL 18+ US RESIDENT POPULATION (CENSUS BUREAU, AS OF 12/2020)**



(Source: U.S. Census Bureau and market monitoring data)

In general, younger cohorts are more over-indexed in their BNPL usage than older cohorts, though the rank-ordering ends at the youngest age cohort. The 18–24 cohort has an index ratio of 1.44 (meaning that members of that cohort’s representation in BNPL is 1.44 times as high as its representation in the overall population), which trails both the 25–33 (2.02) and 34–40 (1.61) cohorts. On the other end of the spectrum, the 65+ cohort’s index ratio of 0.1 (it represents 22 percent of the overall population versus 2.1 percent of the BNPL borrower base) makes it the most underrepresented age group.

<sup>27</sup> United States Census Bureau, *National Population by Characteristics: 2010-2019*, “Monthly Postcensal Resident Population, 7/1/2020 to 12/1/2020” (February 16, 2022), available at <https://www.census.gov/data/tables/time-series/demo/popest/2010s-national-detail.html>

### 3.2.2 Credit assignment strategy

BNPL lenders' underwriting models work in concert with their strategies on how much credit to extend to each approved applicant. Many lenders employ a "low-and-grow" strategy: extending limited credit to first-time borrowers, and gradually raising the amount of credit extended as the borrower exhibits positive repayment behavior.

While a general low-and-grow strategy is commonplace in the BNPL industry, the exact amount assigned to first-time borrowers is not. One lender, for example, caps its credit extension to first-time borrowers at \$600 (though in practice it may set lower amounts for many first-time borrowers). Another lender has caps for first-time borrowers that range from \$100 to \$1,000, depending on various risk factors. Some BNPL lenders also restrict the number of concurrent loans a borrower may have outstanding, though that is also not uniform across the industry.

Historically, consumers interacting with BNPL lenders via the merchant partner acquisition model did not see their credit assignment amount separate from the present transaction. Since the original iterations of BNPL were executed at checkout, the credit assignment process was often interwoven with the ultimate approval/decline decision for the specific purchase in question.

The app-driven acquisition model has made the amount of available credit for which a consumer is qualified much more explicit. Upon logging into the app, users are often guided to immediately apply for credit (before they have selected a purchase). Approved users are then typically presented with a purported available credit amount, sometimes referred to as "purchase power,"<sup>28</sup> "pre-approved to spend,"<sup>29</sup> "estimated spending power,"<sup>30</sup> or "prequalified to spend."<sup>31</sup>

The approved amount is usually considered a placeholder until the user actually attempts to take a BNPL loan, at which point they are re-underwritten. All four of the lenders surveyed who have

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<sup>28</sup> Klarna, *How much am I eligible to spend?* (2022), available at <https://www.klarna.com/us/customer-service/how-much-am-i-eligible-to-spend>. Also see Klarna mobile application.

<sup>29</sup> Afterpay, *Financial Wellness* (2022), available at <https://www.afterpay.com/en-US/financial-wellness>. Also see Afterpay mobile application.

<sup>30</sup> Zip, *How much can I spend using the Zip app?* (2022), available at <https://help.us.zip.co/hc/en-us/articles/4402386078619--How-much-can-I-spend-using-the-Zip-app>. Also see Zip mobile application.

<sup>31</sup> Affirm, *About prequalifying* (2022), available at <https://helpcenter.affirm.com/s/article/about-prequalifying>. Also see Affirm mobile application.

proprietary apps have text that accompanies the “information” icon next to a user’s available credit that describes it as “estimated” and not guaranteed.<sup>32</sup>

Through CFPB complaints, some consumers reported that BNPL lenders lack transparency regarding credit assignment. Some consumers complained about arbitrary decreases, rendering them unable to use the product or make otherwise planned purchases: “I’ve been having an account with [BNPL lender] for 2+ years and this is the 2nd time they dropped my limit and changed my status for no reason.”<sup>33</sup>

Other consumers have noted that their available credit, as displayed, may not reflect the user’s actual purchasing power at a given lender. As one user noted, “consistently [BNPL lender] tells its users that they have about \$1300.00 in credit but only ever allows it to spend just under \$300.00 over time no matter whether one has excellent payment history, pays early, has excellent credit rating... the policy is not clear.”<sup>34</sup> These declines may inhibit the consumer’s ability to effectively plan for certain purchases and affect their relationships with lenders and merchants.

### 3.2.3 Fraud and age screening

BNPL lenders use additional forms of screening to address potential fraud and to ensure that potential borrowers meet applicable state minimum age requirements.<sup>35</sup>

Fraud screening consists of a combination of first- and third-party data sources designed to detect users with no intent to repay. As is the case with other forms of lending, many of the data sources used in BNPL lenders’ fraud screening involve various forms of Personally Identifiable Information (PII) meant to identify individuals associated with previous fraudulent behavior.

All five of the lenders surveyed require applicants to enter their date of birth as part of the BNPL application and will decline credit to any applicant whose birthdate does not meet minimum age requirements. Three of the five lenders also use a third-party vendor to validate the applicant’s submitted birthdate by matching to other elements from the application (such as name, address,

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<sup>32</sup> Affirm, Afterpay, Klarna, and Zip apps; also noted in the previously cited pages of the lenders’ websites.

<sup>33</sup> Consumer Financial Protection Bureau, *Consumer Complaint 4813400* (October 15, 2021), available at <https://www.consumerfinance.gov/data-research/consumer-complaints/search/detail/4813400>

<sup>34</sup> Consumer Financial Protection Bureau, *Consumer Complaint 4732609* (September 18, 2021), available at <https://www.consumerfinance.gov/data-research/consumer-complaints/search/detail/4732609>

<sup>35</sup> All five lenders surveyed have a global minimum age policy of 18 years.

phone, and email). Lenders often employ this additional verification step to ensure proper product usage and to mitigate various forms of fraud.

## 3.3 Account Management/Repayment

### 3.3.1 Payment method selection, change, and removal

As discussed above, BNPL lenders typically require borrowers to pay a share of the purchase price (usually 25 percent) as a down payment at checkout. Four of the five lenders surveyed require borrowers to use their existing debit or credit card for the down payment. This practice serves two main purposes. First, debit and credit card networks provide instantaneous verification that the applicant has sufficient checking account funds (debit card) or available credit (credit card) to cover the down payment, which effectively guarantees that the first installment will be paid. Second, lenders are able to automatically debit the same card for the three subsequent installments. As will be discussed in subsequent sections, this commonly adopted “mandatory autopay” practice may present risks to borrowers.

Table 2 below shows the share of all individual BNPL installment payments by payment method.

**TABLE 2: SHARE OF BNPL INSTALLMENT PAYMENTS BY PAYMENT METHOD, 2019-2021**

Payment Method	2019	2020	2021
Debit card	86.8%	88.5%	89.0%
Credit card	12.5%	11.0%	10.1%
ACH	0.3%	0.2%	0.6%
Prepaid card	0.3%	0.3%	0.3%
Check	< 0.1%	< 0.1%	< 0.1%

Debit card is the overwhelming payment method of choice, with an 89 percent share of all payments made in 2021. Between the five lenders surveyed, debit’s share ranged from 74 percent to 92 percent, and credit’s share ranged from 8 to 21 percent. Debit and credit cards combined account for over 99 percent of all payments in each of the three years surveyed.

Consumer advocates have critiqued BNPL lenders for permitting payments via credit card, effectively allowing borrowers to pay for credit with credit.<sup>36</sup> The two most common risks cited are “hidden interest” (*i.e.*, that borrowers will end up paying interest on BNPL purchases if they use a credit card on which they revolve, or do not pay the balance in full) and general concerns of overextension from shifting debt between credit products.

All five lenders surveyed allow borrowers to change their payment method for the second through fourth installments. Some lenders have payment change options on their online portals in addition to Interactive Voice Recognition and traditional phone channels. Depending on the lender and contact channel, borrowers may be able to make subsequent payments via Automated Clearing House (ACH, *i.e.*, direct bank transfer), prepaid card, or check.

BNPL lenders have different operational policies concerning payment method removal (*i.e.*, removing autopay without adding a new payment method). One lender allows borrowers to do so on its self-service online portal. A second lender allows borrowers to do so by contacting customer service electronically or by phone, and a third allows it via phone-based customer service only. Two other lenders generally prohibit the practice, meaning that borrowers cannot turn autopay “off.”<sup>37</sup>

By implementing these policies, lenders can benefit from increased payment “stickiness” to keep credit losses below a desired threshold, which may allow lenders to be less stringent in their underwriting and credit assignment strategies. However, from the borrower’s perspective, forced autopay may have the effect of depriving those borrowers of a degree of agency. A borrower facing multiple concurrent debts and bills may prefer to prioritize other obligations over their BNPL loan, and policies that limit that ability can be harmful to the borrower’s financial well-being. Likewise, not allowing borrowers to easily remove their payment method could inadvertently lead to overdraft.

### 3.3.2 Late fees

Three of the five lenders surveyed charge late fees for missed payments, typically the minimum of a flat fee or a percentage of the missed payment. One lender previously charged late fees but ended that practice in Q4 2021. One of the lenders that currently charges late fees does not limit

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<sup>36</sup> As one response to the CFPB’s public request for comment argued, “For those with revolving credit outstanding on their cards, BNPL charges will begin to accrue interest from the day they post, and the so-called ‘free’ BNPL loan will not, in fact, be free.”

Comment from Center for Responsible Lending (March 25, 2022), available at <https://www.regulations.gov/comment/CFPB-2022-0002-0028>

<sup>37</sup> One of those two lenders allows customer service associates to remove autopay in “certain cases,” but did not provide additional context on the frequency of or situations leading to these cases.

late fee amounts on either a per-installment or per-loan basis, except in two states where a limit is required by law. Depending on the borrower's state of residence, late fees may vary.<sup>38</sup>

Of the three lenders who charge late fees, two have a policy to charge a late fee at 10 days past due (DPD), while the other lender may charge the fee after one DPD. In the past, several lenders have reserved the ability to charge multiple late fees for a single missed installment, and one lender outside the scope of the inquiry may currently charge two late fees after a missed payment.<sup>39</sup> Some lenders also cap late fees based on the order amount or the amount of the missed payment.

Table 3 below summarizes the policies of the lenders that may charge late fees.

**TABLE 3: LATE FEE POLICIES, 2019-2021**

	2019		2020		2021	
	Amount	Frequency	Amount	Frequency	Amount	Frequency
Lender 1	\$8	Twice per missed payment	\$8 (capped)	Once per missed payment	\$8 (capped)	Once per missed payment
Lender 2	\$10 (capped)	Once per missed payment	\$7	Once per missed payment	\$7 (capped)	Once per missed payment
Lender 3	\$7	Twice per missed payment	\$7	Once per missed payment	\$7	Once per missed payment

As shown in Table 4 on the following page, 10.5 percent of borrowers were charged at least one late fee in 2021, while 6.7 percent of loans incurred at least one late fee.

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<sup>38</sup> While some states consider BNPL to be consumer credit and require state licensing or registration, as well as compliance with state consumer credit laws, other state laws do not require licensing or registration for BNPL products with no interest or finance charges. All five of the BNPL lenders surveyed as part of the CFPB's December 2021 market monitoring orders (Affirm, Afterpay, Klarna, PayPal, and Zip) are currently licensed or registered in several states under consumer credit regulations, although at least one BNPL lender now partners with a bank to issue some of its BNPL loans.

<sup>39</sup> Four, *User Agreement* (2022), available at <https://www.paywithfour.com/legal/user-agreement>

**TABLE 4:** LATE FEE METRICS, 2019-2021

	2019	2020	2021
Borrower-level late fee rate <sup>40</sup>	8.5%	7.9%	10.5%
Loan-level late fee rate <sup>41</sup>	5.7%	4.8%	6.7%
Late fees collected as a share of GMV	0.31%	0.20%	0.28%

Limiting the assessment to lenders that charge late fees, approximately 12 percent of borrowers were charged at least one late fee in 2021 and 7 percent of loans incurred at least one late fee. While the total amount of late fees charged increased nearly tenfold from 2019 to 2021, this was accompanied by a commensurate increase in loan origination volume.

On a normalized basis, late fees charged decreased from 2019 to 2020, but experienced an uptick from 2020 to 2021. Several lenders changed their practices in this period, with one entity dropping late fees. Two lenders introduced late fee caps on either a per-installment or per-loan basis, while another eliminated an “arrears fee” charged in addition to standard late fees. However, it is unclear whether the relative decrease in late fees from 2019 to 2020 is due to policy changes or volatile macroeconomic conditions brought about by the COVID-19 pandemic.

Several lenders also waive certain late fees on borrower request or a showing of hardship, and not all late fees charged are collected. In 2021, 57 percent of all late fees charged were collected by the lenders.

Late fees in the BNPL should be considered in the context of a product for which virtually all borrowers are on autopay. As a result, the assessment of a late fee suggests that a borrower’s checking account lacked sufficient funds for the BNPL payment to be successful.

### 3.3.3 Returns/Disputes

When a borrower wishes to return or dispute a product purchased using a BNPL loan, all five lenders instruct the borrower to contact the merchant that sold the product. If the merchant processes the return, the funds will be credited to the borrower after a processing delay. Due in part to the common use of BNPL in the apparel and fashion industries, returns are a relatively

<sup>40</sup> Defined as the number of unique borrowers charged one or more late fees divided by the total number of borrowers.

<sup>41</sup> Defined as the number of loans with one or more late fees divided by the total number of loans.

frequent occurrence among the five lenders. As seen in Table 5 below, 13.7 percent of loans involved a return or dispute in 2021, and on a dollar basis, 60.3 percent of these returns or disputes were refunded.

**TABLE 5: RETURN AND DISPUTE METRICS, 2019-2021**

	2019	2020	2021
Dollar amount of returns/disputes (\$ millions)	227	680	1,807
Dollar amount of refunds (\$ millions)	102	368	1,089
Dollar refund rate <sup>42</sup>	45.1%	54.1%	60.3%
Loan return/dispute rate <sup>43</sup>	14.8%	12.2%	13.7%
Dollar return/dispute rate <sup>44</sup>	5.0%	4.4%	4.5%

The return process may be complicated when the merchant declines to authorize a refund for a disputed item. In these cases, a borrower may contact the BNPL lender to file a dispute, either via the lender's app or by contacting customer support. The BNPL lender then generally begins an investigation and contacts both the borrower and merchant. Once the investigation is concluded, the lender assigns responsibility to one party and may issue a refund or credit. However, with the short-term, six-week nature of BNPL loans, a successful merchant dispute may not be resolved during the loan term. In these instances, the borrower may be required to make additional payments under the loan contract until the investigation is concluded.

In the event of a non-partnered loan facilitated by a virtual card, dispute resolution is complicated by the involvement of issuer processors that are responsible for generating the single-use cards. Disputes initiated by the borrower through the BNPL lender are mediated through the issuer processor before reaching the merchant. Likewise, a return or refund initiated by the merchant must go through the issuer processor before reaching the BNPL lender. Since the merchant is unable to distinguish a BNPL single-use card from other card transactions, the merchant may be unaware of the BNPL lender's role, creating potential communication lapses and leaving borrowers responsible for ongoing payments during these

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<sup>42</sup> Defined as the dollar amount of loans refunded as a share of the dollar amount of loans returned or disputed.

<sup>43</sup> Defined as the number of loans involving a return or dispute divided by the total number of loans originated in a given year.

<sup>44</sup> Defined as the dollar amount of loans returned or disputed as a share of gross merchandise volume.

lapses. As one borrower who experienced issues with a virtual card transaction noted in a CFPB complaint narrative, “I called [merchant] and they had no idea who [BNPL lender] was... [BNPL lender] and [merchant] are pointing fingers at each other and I am left holding the bag.”<sup>45</sup>

Consumer complaints to the CFPB indicate that returns and disputes are a common concern.<sup>46</sup> In some instances, consumers have reported difficulties in informing the BNPL lender that they are disputing a purchase, concerns with continued payment on a disputed item, and a general opacity in the dispute process.<sup>47</sup> In response to these complaints, BNPL lenders gave varied answers. They sometimes offered consumers a refund, and in other instances stated they were unable to assist for various reasons such as lack of action on a consumer’s part. For example, one consumer stated in their complaint:

*[BNPL lender] refuses to acknowledge and follow its own published dispute policies. I have had 2 recent issues with merchants where they clearly violated the merchant guidelines published on [BNPL lender’s] website resulting in a case that clearly qualified for a dispute. In both instances, the company completely refused to even open a dispute and investigate the now fraudulent charges... Screenshots of all conversations with the merchant were submitted to [BNPL lender] and they refused to investigate the dispute.<sup>48</sup>*

In its response, the company stated it was unable to help the consumer obtain a refund because the consumer had not adequately attempted to obtain a refund from the merchant first.

One lender surveyed requires continued payments pending a dispute, two lenders allow borrowers to defer payment for a short time following a reported dispute, and two lenders stop payment indefinitely during a reported dispute. The ease of reporting a dispute also varies from

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<sup>45</sup> Consumer Financial Protection Bureau, *Consumer Complaint 4296099* (April 14, 2021), available at <https://www.consumerfinance.gov/data-research/consumer-complaints/search/detail/4296099>.

<sup>46</sup> This analysis was based on a review of consumer complaints about BNPL loans received by the Bureau between Jan. 1, 2021 and Mar. 31, 2022. Other common topics included issues with debt collection. For example, consumers complained that the BNPL credit was applied for fraudulently by someone else. Consumers also sometimes complained that their accounts were sent to collection for items they had returned, or that they were being contacted by collection agencies about debts that they had already paid.

<sup>47</sup> See, e.g., Consumer Complaint 5221297, <https://www.consumerfinance.gov/data-research/consumercomplaints/search/detail/5221297> (consumer’s original item was stolen in transit and the second arrived damaged by which point the BNPL lender’s deadline for a refund had passed); Consumer Complaint 5359461, <https://www.consumerfinance.gov/data-research/consumercomplaints/search/detail/5359461> (consumer complained about confusion and delays in refund for defective merchandise).

<sup>48</sup> Consumer Financial Protection Bureau, *Consumer Complaint 4288475* (April 11, 2021), available at <https://www.consumerfinance.gov/data-research/consumer-complaints/search/detail/4288475>.

lender to lender and may contribute to borrower frustration. Though not all lenders provided the information, most of them require that borrowers submit disputes in 60 or 120 days.

### 3.3.4 Other fees

In addition to late fees, two lenders either currently charge or recently charged other consumer fees. One lender charged a non-sufficient funds (NSF) fee of \$25 (lowered to \$10 or installment amount, whichever was lower, in Q4 2021) for ACH payments that failed to clear, resulting in a chargeback. Due to the low volume of payments made via ACH, the cumulative amount of NSF fees collected in all three years covered by the CFPB's market monitoring orders was approximately \$640,000. In 2021, the amount of NSF fees charged amounted to less than one percent of late fees in the same year. The lender stopped charging NSF fees in Q4 2021.

Another lender charges a fee on virtual-card-facilitated loans made with non-partnered merchants, amounting to \$1 per installment payment (*i.e.* \$4 per loan). In addition, a lender outside the scope of the CFPB's market monitoring orders charges a service fee of \$0.25 per installment payment (*i.e.* \$1 per loan).<sup>49</sup>

### 3.3.5 Failed Payments, Re-presentments, and Charge-offs

On occasion, payments made by borrowers to BNPL lenders fail due to insufficient funds or credit associated with the borrower's payment method. As shown in Table 6 below, in 2021, 4.1 percent of all loans experienced one or more declined or failed payment, and 7.5 percent of all borrowers experienced a failed or declined payment. Mirroring late fee trends, declined or failed payments decreased slightly from 2019 to 2020 but increased from 2020 to 2021.

**TABLE 6: DECLINED OR FAILED PAYMENT METRICS, 2019-2021**

	<b>2019</b>	<b>2020</b>	<b>2021</b>
Loan-level payment failure/decline rate <sup>50</sup>	2.6%	2.4%	4.1%
Borrower-level payment failure/decline rate <sup>51</sup>	3.9%	4.3%	7.5%

<sup>49</sup> *nate, nate pay later terms and conditions* (2022), available at <https://www.nate.tech/paylater-terms>.

<sup>50</sup> Defined as the number of loans with one or more failed or declined payments as a share of total loans originated.

<sup>51</sup> Defined as the number of borrowers who had at least one payment fail or declined divided by the total number of borrowers.

In the event of a failed or declined payment, all five lenders allow for additional re-presentments (*i.e.*, attempts to reauthorize) the payment at least one additional time, with one lender allowing for eight potential re-presentments. On average, the lenders surveyed will attempt to re-present as soon as 1 DPD and every one to four days from the previous failed re-presentation attempt.

The final stage of a loan's delinquency is charge off, a designation that a lender assigns to severely delinquent debt on which it has a very low expectation of collecting. The five lenders assign a charged off status at different levels of a loan's delinquency, ranging from 84 to 180 days past due.

Table 7 below details the aggregated loan charge off rate (*i.e.*, the number of charged off loans as a portion of all originated loans) and unique borrower charge off rate (*i.e.*, the number of unique borrowers with at least one charged off loan as a portion of all unique borrowers) for 2019 through 2021.

**TABLE 7: AGGREGATED LOAN AND UNIQUE BORROWER CHARGE OFF RATES, 2019-2021**

Metric	2019	2020	2021
Loan charge off rate	2.59%	1.83%	2.39%
Unique borrower charge off rate	3.54%	2.93%	3.79%

The decrease in charge off rates in 2020 was consistent with metrics seen across consumer lending industries, as Covid-19-induced behavioral changes and government stimulus payments temporarily bolstered consumer savings.<sup>52</sup> The report will delve into the 2021 increase in charge off rates in Section 4, which details lenders' responses to shocks to their unit margins.

Commenters have noted concerns about potential adverse impacts of BNPL loan delinquencies on younger borrowers and other demographic groups. One submission to the CFPB's public request for comment stated that “[y]ounger, lower-income and less financially-sophisticated consumers are at grave risk of being targeted to buy more and accumulate debt that they cannot afford.”<sup>53</sup>

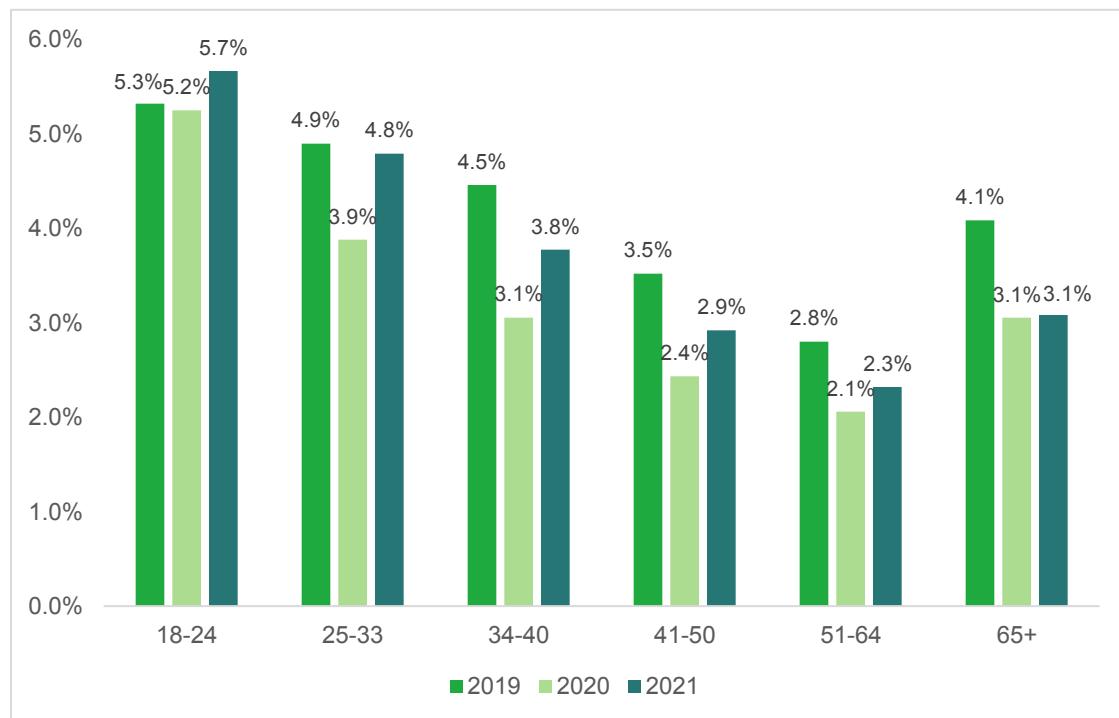
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<sup>52</sup> Federal Reserve Bank of Kansas City, *Study shows surge in savings during the pandemic* (April 29, 2021), available at <https://www.kansascityfed.org/ten/2021-spring-ten-magazine/study-shows-surge-in-savings-during-the-pandemic>

<sup>53</sup> Comment from Center for Responsible Lending (March 25, 2022), available at <https://www.regulations.gov/comment/CFPB-2022-0002-0028>

Figure 3 below shows the share of unique borrowers with one or more loan in derogatory status, cut by age cohort.<sup>54</sup>

**FIGURE 3: SHARE OF UNIQUE BNPL BORROWERS BY AGE COHORT WITH 1+ DEFAULT OR CHARGE-OFF**



With the exception of the oldest cohort, credit performance rank-ordered by age: the younger the age cohort, the higher the share of borrowers with loans in derogatory status. This pattern held for each of the three years surveyed and is consistent with the rank-ordering of credit card delinquencies by age cohort reported in the New York Federal Reserve Bank's quarterly Household Debt and Credit report.<sup>55</sup>

Each age cohort experienced an increase in the share of unique borrowers with loans in derogatory status from 2020 to 2021, mirroring macroeconomic trends that are discussed in further detail in Section 4. The youngest age cohort (18–24) was the only one to record a higher derogatory rate in 2021 (5.7 percent) than in 2019 (5.2 percent).

<sup>54</sup> *Derogatory* is defined as a loan that meets either of the following two conditions: in default (*default* defined as the failure of a consumer to repay their obligation), or sent to a third-party debt collector.

<sup>55</sup> Federal Reserve Bank of New York, *Quarterly Report on Household Debt and Credit: 2022 Q1* (May 2022), available at [https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hfdc\\_2022q1.pdf](https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/hfdc_2022q1.pdf)

### 3.3.6 Collections

All five of the lenders surveyed have, at least some point between 2019 and 2021, used third-party debt collectors to collect delinquent loan balances. Two of the lenders only used debt collectors for specific, short intervals, while the other three use debt collectors as part of their general collections strategy. One common industry practice is to refer loans to debt collectors after the loans have reached charged off status, and any payments made via debt collectors are usually counted in the lender's income statement as "recoveries."

The third-party debt collector establishes a new relationship with the borrower. As a general practice, given the low-dollar, digital-first nature of the product, debt collectors collecting BNPL loans rely more heavily on digital communications channels (text and email) than on traditional channels such as phone calls and paper mail.

Throughout the three years surveyed, all of the agreements between BNPL lenders and debt collectors were on a contingency placement basis (*i.e.*, the debt collector earns a commission on all debts collected, but the debts remain on the balance sheet of the BNPL lender) rather than sold to a third-party debt buyer.

# 4. Market Metrics and Trends

## 4.1 Volume and Usage

Table 8 below shows the aggregated loan and dollar origination figures from the five lenders surveyed from 2019 through 2021, along with the 2019-to-2021 compound annualized growth rate (CAGR).<sup>56</sup>

**TABLE 8:** BNPL LOAN ORIGINATION VOLUME AND AVERAGE LOAN SIZE, 2019-2021

	2019	2020	2021	19-21 CAGR
Loan Originations (Millions)	16.8	68.4	180.0	227%
Dollar Originations <sup>57</sup> (\$ Billions)	2.0	8.3	24.2	245%
Average Loan Size (Dollar Originations / Loan Originations)	\$121	\$121	\$135	5.5%

In 2021, the five lenders originated 180 million BNPL loans totaling \$24.2 billion,<sup>58</sup> for an average loan size (often referred to as average order value) of \$135. Both loan and dollar originations are growing at over 200 percent per year since 2019, with the latter's growth slightly outpacing the former.

The largest of the five lenders surveyed accounted for 39 percent of GMV in 2021, and the smallest accounted for 6 percent. In 2020, the largest lender offering BNPL loans accounted for 57 percent of overall GMV; in 2019, the largest lender accounted for 71 percent.

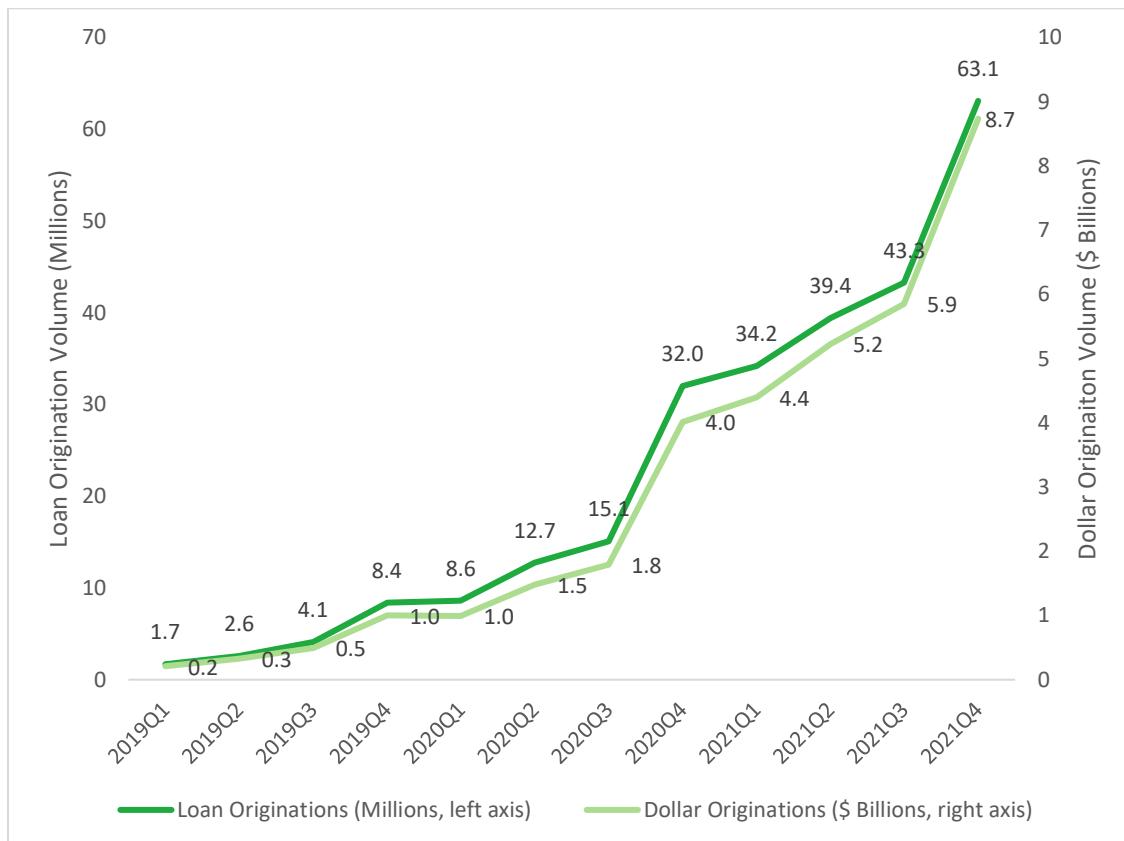
Figure 4 on the following page shows the trend of loan and dollar originations by quarter.

<sup>56</sup> CAGR can be thought of as the average year-over-year rate of growth for a given metric. For example, the 245 percent CAGR for unit originations means that, over the two year-over-year periods studied (2019 to 2020 and 2020 to 2021), unit originations grew by an average of 245 percent per year. Its main analytical benefit is to create a standardized figure that can compare growth over different lengths of time.

<sup>57</sup> Also referred to as Gross Merchandise Volume, or GMV.

<sup>58</sup> This dollar originations (or GMV) figure includes the overall checkout amount of each loan, inclusive of the 25% down payment. For example, a \$100 purchase that is financed via BNPL will require \$25 paid at checkout and \$75 paid in three subsequent installments. The GMV from that purchase is \$100.

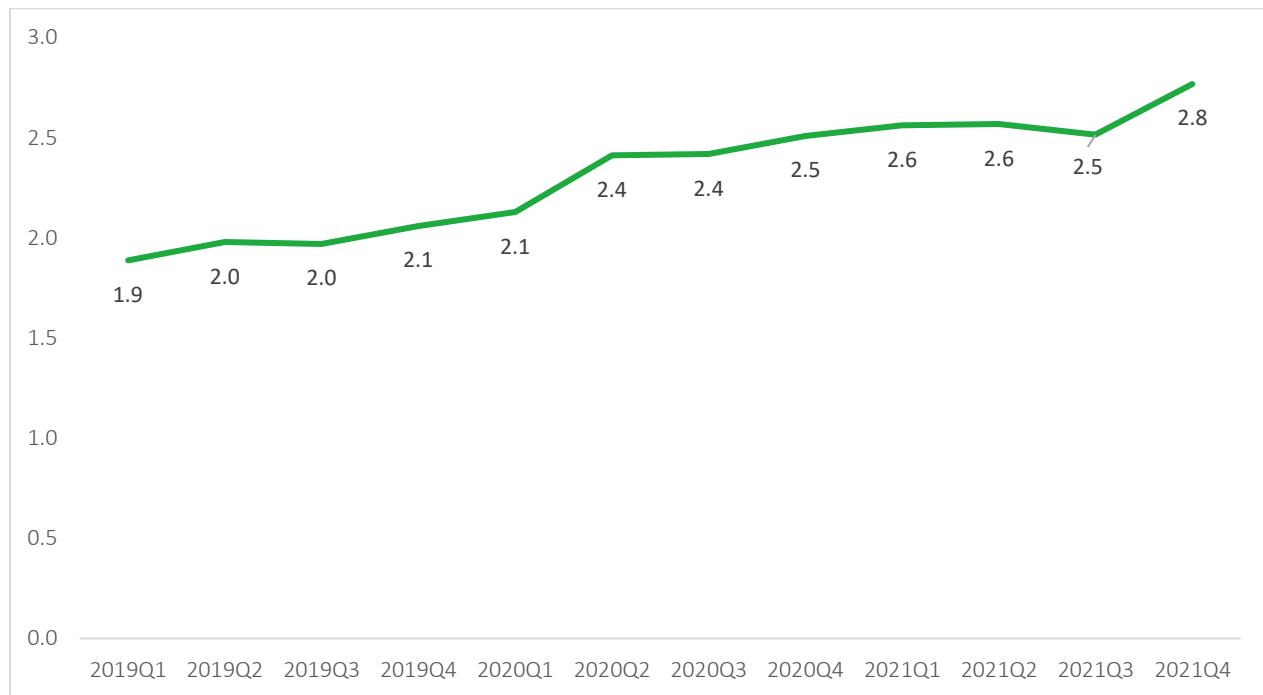
**FIGURE 4: BNPL LOAN ORIGINATION VOLUME BY QUARTER, 2019-2021**



Not surprisingly, the two metrics have moved together, with near-identical quarter-over-quarter growth rates. The largest deviation between the two came between Q4 '20 and Q2 '21, when GMV growth slightly outpaced loan growth (evidenced by the increase in average loan size in 2021). The fourth quarter (*i.e.*, the holiday shopping season) registered the highest quarter-over-quarter growth in each of the three years surveyed.

As discussed in other sections in this report, repeat usage is a key metric for BNPL lenders' top and bottom lines. Figure 5 on the following page shows the number of loans originated per unique borrower by quarter (or "usage rate").

**FIGURE 5: BNPL QUARTERLY USAGE RATE, 2019-2021**



These figures are aggregated across the five lenders surveyed, but only for loans on each lender's balance sheet. In other words, a usage rate of 2.5 means that the average BNPL borrower used the product 2.5 times in a quarter at a given lender; this data cannot be used to measure the number of loans that same borrower may have taken across different BNPL lenders. Due to the fact that the data was presented in terms of unique borrowers per quarter, it is not possible to infer the number of times the average borrower uses BNPL throughout the course of a year.<sup>59</sup>

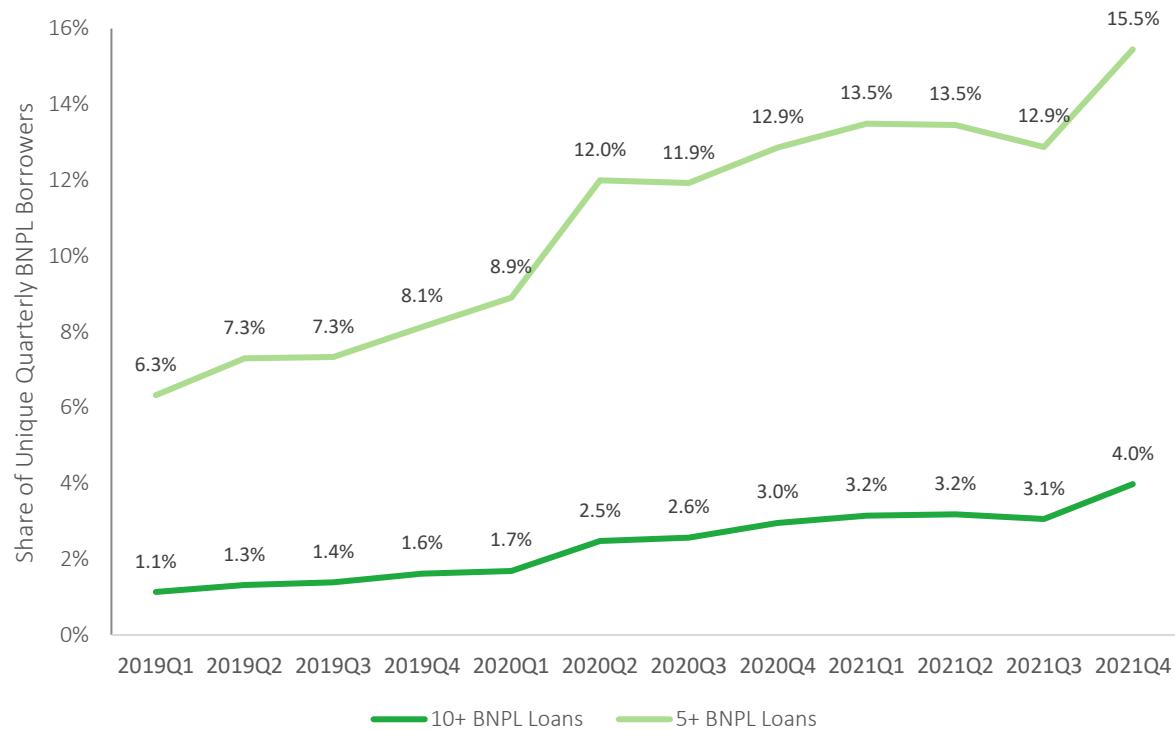
The quarterly usage rate has steadily increased over the past three years, reaching a high of 2.8 loans per unique borrower in Q4 '21. In Q4 '21, four of the five lenders surveyed had a usage rate between 2.9 and 3.2 per quarter, while the fifth had a usage rate below 2.

While these metrics represent the *average* usage across the BNPL customer base, the increase in repeat usage has accelerated faster at the upper ends of the spectrum. Figure 6 on the following page shows the share of unique quarterly borrowers with at least five and at least ten BNPL loans in that quarter.

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<sup>59</sup> For example: of the 13.3 million unique borrowers across the five lenders surveyed in Q1 '21, some unknown number also used the product in Q2, Q3 and Q4 '21. Thus, one cannot sum the unique borrower totals from separate quarters, as that would entail an unknown amount of double counting.

**FIGURE 6: SHARE OF UNIQUE QUARTERLY BNPL BORROWERS WITH 5+ AND 10+ LOANS, 2019-2021**



In Q4 '21, 15.5 percent of unique borrowers took out five or more BNPL loans, a 144 percent increase from Q1 '19 and a 20 percent increase from Q4 '20. On a normalized basis, the growth figures are even more pronounced for the share of borrowers who took out ten or more BNPL loans, with a 251 percent increase from Q1 '19 to Q4 '21 (1.1 to 4.0 percent) and a 34 percent increase from Q4 '20 to Q4 '21 (3.0 to 4.0 percent).

BNPL lenders segment their loan volume by merchant vertical (*i.e.*, retail industry).<sup>60</sup> Table 9 on the following page shows the GMV (*i.e.*, dollar originations) by vertical and year across the five lenders surveyed, expressed as raw dollar amounts and as a share of the year's total.

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<sup>60</sup> The CFPB received loan vertical information from all five lenders per each lender's naming conventions. As a result, the CFPB standardized the data and matched each lender-provided vertical name with uniform subvertical and vertical names. See Appendix Section 7.1 for the full list. BNPL lenders are also able to prohibit consumers from using BNPL for specific excluded products. The list of these excluded products usually includes illegal items such as narcotics and drug paraphernalia, gambling, and cash-equivalent items with high fraud risk (gift cards, money transfers, cryptocurrencies, etc.). Many lenders also exclude weapons, including firearms, though this exclusion is not universal across the BNPL industry. See New York Times, 'Buy Now, Pay Later' Becomes a New Way to Pay for Guns (June 24, 2022), available at <https://www.nytimes.com/2022/06/24/business/buy-now-pay-later-guns.html>

**TABLE 9:** GMV (\$ BILLIONS) AND PERCENT OF TOTAL BY MERCHANT VERTICAL, 2019-2021

Vertical	2019		2020		2021	
	GMV (\$B)	% of Total	GMV (\$B)	% of Total	GMV (\$B)	% of Total
Apparel	1.34	66.1%	4.74	57.0%	12.43	50.5%
Personal Effects <sup>61</sup>	0.09	4.5%	0.72	8.7%	2.76	11.2%
Mass Market <sup>62</sup>	0.13	6.5%	0.92	11.0%	2.65	10.8%
Beauty	0.29	14.0%	1.07	12.8%	2.01	8.2%
Other	0.12	5.7%	0.26	3.1%	1.49	6.1%
Home <sup>63</sup>	0.03	1.7%	0.29	3.5%	1.11	4.5%
Travel/Entertainment	0.01	0.5%	0.06	0.7%	0.80	3.2%
Services <sup>64</sup>	0.01	0.5%	0.10	1.2%	0.64	2.6%
Automotive	0.002	0.1%	0.03	0.4%	0.27	1.1%
Health <sup>65</sup>	0.01	0.2%	0.09	1.1%	0.23	0.9%
Everyday <sup>66</sup>	0.003	0.2%	0.04	0.5%	0.23	0.9%

As a whole, the vertical mix is diversifying over time. Apparel and Beauty combined to make up 58.6 percent of GMV in 2021, down from 69.9 percent in 2020 and 80.1 percent in 2019. Meanwhile, the five lowest-volume verticals (Travel/Entertainment, Services, Automotive,

<sup>61</sup> The Personal Effects vertical includes merchants from the following sub-verticals: Electronics, Fitness/Sporting Equipment, Games/Hobbies, and Jewelry

<sup>62</sup> The Mass Market vertical includes merchant from the following sub-verticals: Department Stores, Discount / wholesale, General Goods, and General Merchandise

<sup>63</sup> The Home vertical includes merchants from the following sub-verticals: Furniture/Home Furnishings and Home Improvement

<sup>64</sup> The Services vertical includes merchants from the following sub-verticals: Education, Insurance, Pet Care, Services, Subscription Fees

<sup>65</sup> The Health vertical includes merchants from the following sub-verticals: Elective Medical and Health Products

<sup>66</sup> The Everyday vertical includes merchants from the following sub-verticals: Auto – Transportation, Groceries, Food/Drink (non-grocery), and Utilities

Health, and Everyday) comprised 8.8 percent of GMV in 2021, up from 3.9 percent in 2020 and 1.5 percent in 2019.

The sub-verticals that make up the Everyday vertical have received substantial attention over the past year as examples of BNPL's expansion from discretionary to essential purchases. Although it still accounts for less than one percent of overall GMV, the Everyday vertical has grown at a rapid pace: from \$3.2 million in 2019 to \$229.2 million in 2021. Its annualized growth rate of 736 percent was the third highest of the 11 verticals surveyed.<sup>67</sup> One lender accounted for 60 percent of the overall GMV in the Everyday vertical in 2021, and Everyday's share of that lender's annual GMV grew from 0.9 percent in 2019 to 2.4 percent in 2020 to 4.6 percent in 2021.

Education, a sub-vertical within the Services vertical, has received attention from the States and consumer advocates.<sup>68</sup> They have expressed concern about both BNPL and POS lenders enabling the financing of educational expenses, particularly at non-accredited institutions. In 2021, the five lenders surveyed originated \$59.8 million in BNPL loans to retailers in the Education sub-vertical (0.24 percent of overall GMV), up from \$7.1 million in 2020 (0.09 percent of overall GMV) and \$0.47 million (0.02 percent of overall GMV) in 2019. The 1,028 percent CAGR increase from 2019 to 2021 was the fourth highest of the 23 sub-verticals surveyed. There was substantial concentration within the Education sub-vertical, as one lender accounted for 74 percent of its overall GMV in 2021.<sup>69</sup>

## 4.2 Unit Margins

A critical metric for the health of a BNPL lender is its unit margin (also referred to as Net Transaction Margin, or NTM): for every \$100 of loans originated, how much does the lender make (or lose), net of expenses? Knowing a firm and industry's unit margin levels and trends reveals how efficient they are at their core lending business and provides a roadmap to potential business model changes that may have material consumer impacts.

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<sup>67</sup> These figures probably undercount the true levels, as necessity purchases likely make up a significant share of the Mass Market and Other verticals.

<sup>68</sup> Student Borrower Protection Center, *Point of Sale Fail: How a Flood of “Buy Now, Pay Later” Student Debt is Putting Millions at Risk* (March 2022), available at [https://protectborrowers.org/wp-content/uploads/2022/03/SBPC\\_BNPL.pdf](https://protectborrowers.org/wp-content/uploads/2022/03/SBPC_BNPL.pdf). Also see <https://www.regulations.gov/comment/CFPB-2022-0002-0025>

<sup>69</sup> The data received from the five lenders surveyed does not include the names of specific merchant partners. For additional information about education vendors who offer BNPL and/or other types of educational purchase finance, please refer to the previously cited report from the Student Borrower Protection Center.

The numerator of this metric only considers variable revenues and expenses: those that are received or incurred on each loan originated.<sup>70</sup> Fixed or upfront costs, as well as step-function costs (those that vary based on volume but at larger scales than individual loans, such as the salaries of a sales team or enterprise vendor contracts) are excluded. Table 10 below shows the unit margins aggregated across the five lenders surveyed for 2019, 2020, and 2021. All figures are expressed as a percent of that year's GMV.<sup>71</sup>

**TABLE 10: AGGREGATED UNIT MARGINS, 2019-2021**

	2019	2020	2021
<i>Revenues</i>			
Merchant Discount Fees	3.39%	2.91%	2.49%
Interchange	0.26%	0.60%	0.67%
Referral/Affiliate	0.16%	0.23%	0.32%
Late Fees	0.31%	0.20%	0.28%
Transaction Fees	0.18%	0.29%	0.26%
<b>Revenue Total</b>	<b>4.29%</b>	<b>4.24%</b>	<b>4.02%</b>
<i>Expenses</i>			
Underwriting	(0.09%)	(0.09%)	(0.08%)
Cost of Funds	(0.52%)	(0.24%)	(0.16%)
Payment Processing/Servicing	(1.51%)	(1.49%)	(1.47%)
Credit Loss Provisions	N/A	(1.15%)	(1.30%)
<b>Expense Total</b>	<b>N/A</b>	<b>(2.97%)</b>	<b>(3.01%)</b>
<b>NET TRANSACTION MARGIN (NTM)</b>	<b>N/A</b>	<b>1.27%</b>	<b>1.01%</b>

<sup>70</sup> See Appendix Section 7.2 for definitions of each revenue and expense item.

<sup>71</sup> For 2019, the accuracy of the credit loss numbers was impacted by analytical issues from some of the lenders surveyed that affected the consistency of the metric (which were rectified for 2020 and 2021). As a result, the Credit Loss Provisions expense line item, along with the Expense Total and NTM metrics, are omitted for 2019.

Between 2020 and 2021, two specific line items contributed to the decline in aggregated NTMs from 1.27 percent to 1.01 percent. First, the revenues received from merchant discount fees (MDFs) declined from 2.91 percent in 2020 to 2.49 percent in 2021. Second, credit losses provisions increased from 1.15 percent in 2020 to 1.30 percent in 2021.

A third area of unit margin deterioration—an increase in funding costs—has occurred in early-to-mid 2022 and is not captured in the data above. Despite this shift occurring outside of the scope of the marketing monitoring orders, its impact is large enough to warrant exploration in this report and is supported by publicly available data.

The ensuing subsections detail each of these three unit-margin-reducing developments.

#### 4.2.1 Decrease in Merchant Discount Fees

The top-line MDF figures that appear in Table 10 above are products of two ratios, as illustrated by the following equation:

$$MDF = \frac{\text{Merchant Discount Fee Revenue}}{\text{Overall GMV}} = \frac{\text{Merchant Discount Fee Revenue}}{\text{GMV from partnered merchants}} \times \frac{\text{GMV from partnered merchants}}{\text{Overall GMV}}$$

Ratio A measures the effective discount rate that lenders obtain from existing merchant partners, while Ratio B measures the merchant partner model's share of overall origination volume. For a lender who does not generate any loan volume via non-partnered merchants in an app-driven model (as is the case for one of the five lenders surveyed), Ratio B is 1, meaning that Ratio A is equivalent to the top-line MDF figure. Conversely, a lender who does not engage in any direct merchant partnerships would register a zero for the numerator of both ratios.<sup>72</sup>

However, since the majority of lenders surveyed originate BNPL loans by both the merchant partner and app-driven acquisition models, it is important to isolate the two ratios to determine the cause of the drop in top-line MDF: a decrease in effective rates charged to partnered merchants, a decrease in the prevalence of the merchant partner model, or—as is in fact the case—a simultaneous decrease in both.

In 2019, the effective discount rate charged to partnered merchants (Ratio A) was 3.84 percent; in 2020, it declined to 3.46 percent, and in 2021 it declined again to 3.08 percent. The importance of this metric is that it controls for business model shifts (encapsulated by Ratio B)

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<sup>72</sup> None of the five lenders surveyed fall into this bucket, but there are other BNPL lenders who utilize this non-partnered-only business model.

to demonstrate that partnered merchants were, on average, paying significantly lower fees to process BNPL transactions in 2021 than in 2020 or 2019.

The main cause of this decline was increased competition: the entrance of new players (two of the five lenders surveyed, among other entrants, began originating BNPL loans in the U.S. within the last two years), along with further entrenchment of existing players. At the same time, lenders improved and streamlined their merchant onboarding processes, which reduced merchants' switching costs and further contributed to competition for merchant partnerships. "The price has dropped due to competition," one BNPL executive acknowledged in January 2022.<sup>73</sup>

In that same timespan, merchant partners' share of overall GMV (Ratio B) also declined, from 89 percent in 2019 to 84 percent in 2020 to 81 percent in 2021 (and 78 percent among the four lenders who originated any non-partnered loans).<sup>74</sup> The relationship between these two ratios is endogenous: as the rates lenders charged merchants in direct partnership models declined, lenders actively sought out alternative business strategies that relied on different merchant revenue sources. This strategic shift will be discussed in detail in Section 4.3.

#### 4.2.2 Increase in credit losses

Table 11 below combines the dollar credit loss provision rates cited above with the loan and unique borrower charge off rate increases cited in Section 3 for 2020 and 2021, which demonstrates that the increase in loan losses was present regardless of metric:

**TABLE 11: UNIT AND DOLLAR CHARGE OFF RATES/PROVISIONS, 2020-2021**

	2020	2021	YoY Percent Change
Loan charge off rate	1.83%	2.39%	+30.3%
Unique borrower charge off rate	2.93%	3.79%	+29.1%
Dollar credit loss provision	1.15%	1.30%	+13.5%

<sup>73</sup> PYMNTS, *Klarna CEO Says BNPL Competition Is Driving Down the Fees Paid by Retailers* (January 26, 2022), available at <https://www.pymnts.com/buy-now-pay-later/2022/klarna-ceo-bnpl-competition-driving-down-fees-paid-retailers>

<sup>74</sup> There are very slight differences between the product of the figures presented the preceding two paragraphs and the top-line MDF figures presented in Table 10. They are attributed to the fact that the data provided by some lenders to the merchant fees section of the income statement-specific requests that helped to populate Table 10 differed slightly from the merchant fees fields provided in the sixteen-page body of the market monitoring orders on account of edge-case accounting differences around the end of each year.

These deteriorating BNPL credit conditions extended beyond the scope of the CFPB's market monitoring orders and have accelerated in the beginning of 2022. One U.S.-based BNPL lender recently reported that its dollar charge-off rate (defined as net charge offs as a percent of GMV) was 3.03 percent in H1 '22, up from 2.31 percent in H2 '21, 2.17 percent in H1 '21, and 1.39 percent in FY '20.<sup>75</sup> An Australian-based BNPL lender reported similar dollar charge off rate figures for its "global" business (over 90 percent of which comes from the Americas region): 3.01 percent in FY '22 (which ran from July 2021 through June 2022), up from 1.57 percent in FY '21.<sup>76</sup>

As one BNPL lender stated in a May 2022 shareholder conference, "the industry as a whole, which has seen bad debts spike, really missed that moment. And we are now going to have to dig our way out of that."<sup>77</sup>

This increase in BNPL losses has mirrored credit trends in similar lending sectors: personal loan delinquencies were up 11 percent from Q4 '20 to Q4 '21;<sup>78</sup> "new delinquencies" of unsecured fintech personal loans climbed throughout the end of Q4 '21 and into Q1 '22 to the highest levels

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<sup>75</sup> United States Securities and Exchange Commission, *Form 10-Q for Sezzle Inc.* (June 30, 2021), available at <https://www.sec.gov/ix?doc=/Archives/edgar/data/0001662991/000166299121000005/szl-20210630.htm>

United States Securities and Exchange Commission, *Form 10-K for Sezzle Inc.* (December 31, 2021), available at <https://www.sec.gov/ix?doc=/Archives/edgar/data/0001662991/000166299122000006/szl-20211231.htm>

United States Securities and Exchange Commission, *Form 10-Q for Sezzle Inc.* (June 30, 2022), available at <https://www.sec.gov/ix?doc=/Archives/edgar/data/0001662991/000166299122000027/szl-20220630.htm>

Calculated by dividing the "Charge-offs, net of recoveries" field by the "Underlying Merchant Sales" field (an alternative name for originations, or GMV). The numerator and denominator values for H2 '21 are calculated by subtracting the H1 '21 figures in the June 30, 2021 10-Q form from the FY '21 figures in the December 31, 2021 10-K form. The lender did not disclose half-year origination or charge off data before 2021, which is the reason for using the FY '20 figure. The numerator and denominator of that figure can be found in the December 31, 2021 10-K form.

<sup>76</sup> Zip.co, *Annual Report* (June 30, 2021), available at <https://zipco.colliercreative.com.au/wp-content/uploads/2021/09/Zip-AR21.pdf>

Zip.co, *FY22 Appendix 4E Preliminary Final Report* (August 25, 2022), available at <https://zip.co/investors/asx-announcements/>

Calculated by subtracting "Recoveries during the period" from "Receivables written-off during the period", then dividing the result by "Transaction Volumes." "Global" is defined as all regions aside from APAC (i.e. Asia Pacific, where the company is based). In FY '22, 91 percent of the lender's "global" transaction volume came from the Americas region; in FY '21 it was 99 percent. The lender did not break out its Americas transactions volume by country in its FY '22 report (it did report that it conducts business in the United States, Canada, and Mexico), but in its FY '21 report it did note that its only Americas transactions (\$2.449 billion) occurred in the United States.

<sup>77</sup> The Wall Street Journal, *Missed Payments, Rising Interest Rates Put 'Buy Now, Pay Later' to the Test* (June 1, 2022), available at <https://www.wsj.com/articles/missed-payments-rising-interest-rates-put-buy-now-pay-later-to-the-test-11654933930>

<sup>78</sup> TransUnion, *Recent Vintage Loans Perform Well Even as More Non-Prime Consumers Secured Credit in Second Half of 2021* (February 2, 2022), available at <https://newsroom.transunion.com/recent-vintage-loans-perform-well-even-as-more-non-prime-consumers-secured-credit-in-second-half-of-2021>

since at least 2016;<sup>79</sup> and bank credit card defaults increased each month from December '21 through April '22.<sup>80</sup> In a reference point that may be especially relevant for BNPL given its youthful demographic skew, one study found that transitions into serious credit card delinquency rose for the 18–29 and 30–39 age demographics from Q3 '21 to Q1 '22 at the same time that they fell for the 40–49, 50–59, 60–69, and 70+ demographics.<sup>81</sup>

In general, the increases in delinquencies described above have primarily been a correction back to pre-Covid-19 levels, as the government stimulus programs that buoyed consumers' balance sheets for several quarters in 2020 and early 2021 ended.<sup>82</sup> It is too early to determine whether BNPL loss rates will level off or decline in the coming months, or whether deteriorating macroeconomic conditions will lead to further loss rate increases. However, one potentially relevant data point comes from New Zealand, where the country's major credit reporting agency reported that BNPL delinquencies rose each month from February to April 2022, with April registering the highest level since the dataset began in 2019.<sup>83</sup>

#### 4.2.3 Increase in cost of funds

Rising interest rates impact nearly every corner of the economy, including BNPL lenders. Most BNPL lenders rely on short-term borrowing to facilitate their core business. And like other nonbank firms with relatively little access to cheaper and less rate-sensitive consumer deposits, many BNPL lenders are particularly exposed to the capital markets.<sup>84</sup>

Within a four-month span from March to July 2022, the Federal Reserve responded to rising inflation with four separate increases to short-term interest rates.<sup>85</sup> These moves, coupled with

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<sup>79</sup> dvo1, *Consumer Credit Performance Report, Volume 2* (June 14, 2022), available at <https://www.dvo1.co/resources/research/consumer-credit-performance-report-vol-2>

<sup>80</sup> S&P Global, *S&P/Experian Bankcard Default Index* (2022), available at <https://www.spglobal.com/spdji/en/indices/indicators/sp-experian-bankcard-default-index/#overview>

<sup>81</sup> New York Fed, *Quarterly Report on Household Debt and Credit*. Serious delinquency defined as a credit card account that is 90 or more days past due.

<sup>82</sup> United States Government Accountability Office, *Stimulus Checks: Direct Payments to Individuals during the COVID-19 Pandemic* (June 29, 2022), available at <https://www.gao.gov/products/gao-22-106044>

<sup>83</sup> Centrix, *May Credit Indicator* (May 2022), available at <https://www.centrix.co.nz/wp-content/uploads/2022/06/Centrix-May-2022-Credit-Indicator-and-Economic-Forecast.pdf>. It is possible that some share of the loans categorized as 'BNPL' are longer-term POS loans.

<sup>84</sup> This exposure is not uniform across all BNPL lenders. Some lenders have access to consumer deposits and are able to fund part of all of their loan portfolios from those lower-cost and less rate-sensitive sources. The degree to which rising interest rates affect unit margins varies by BNPL lender.

<sup>85</sup> Board of Governors of the Federal Reserve System, *Implementation Note* (March 16, 2022), available at <https://www.federalreserve.gov/newssevents/pressreleases/monetary20220316a1.htm>. Also see May 4, June 15, and July 27 Implementation Notes.

the Fed’s strong anti-inflation rhetoric and the markets’ expectations of further hikes, have put major upwards pressure on corporate bond yields.<sup>86</sup>

One BNPL lender directly addressed the substantial impact of interest rate increases on its unit margins during a 2022 earnings call: “[W]e estimate the impact to Revenue less transaction costs as a percentage of GMV to be approximately 40 bps for every 100 basis points of rate movement beyond the current forward curve.”<sup>87</sup>

The public filings from another BNPL lender corroborated this sentiment. Its funding costs as a percent of originations increased by 33 percent (0.30 percent to 0.40 percent) from Q2 ’21 to Q2 ’22, reflecting the increase in interest rates that occurred in the latter period.<sup>88</sup>

## 4.3 Business Trends

Media reports on these shifting unit economics dynamics tend to focus on the impacts to the BNPL lenders themselves. Declining share prices, “down round” private valuations,<sup>89</sup> staff layoffs, and failed mergers have all garnered attention. These headlines have led some analysts to question whether the BNPL “fad” is coming to an end. However, continually increasing consumer usage and interest tell a different story.

As demonstrated in Section 4.1, both unit and dollar BNPL volumes from the five lenders surveyed are growing at an annualized rate of over 200 percent. Underlying consumer interest

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<sup>86</sup> Federal Reserve Bank of St. Louis, *Moody's Seasoned Aaa Corporate Bond Yield* and *Moody's Seasoned Baa Corporate Bond Yield* (August 1, 2022), available at <https://fred.stlouisfed.org/series/AAA> and <https://fred.stlouisfed.org/series/BAA>.

<sup>87</sup> Affirm, *Fiscal Year 2022 Second Quarter Earnings Conference Call* (February 10, 2022), available at <https://investors.affirm.com/static-files/a04c9368-8ad8-4aec-86d7-d3a4c6399383>

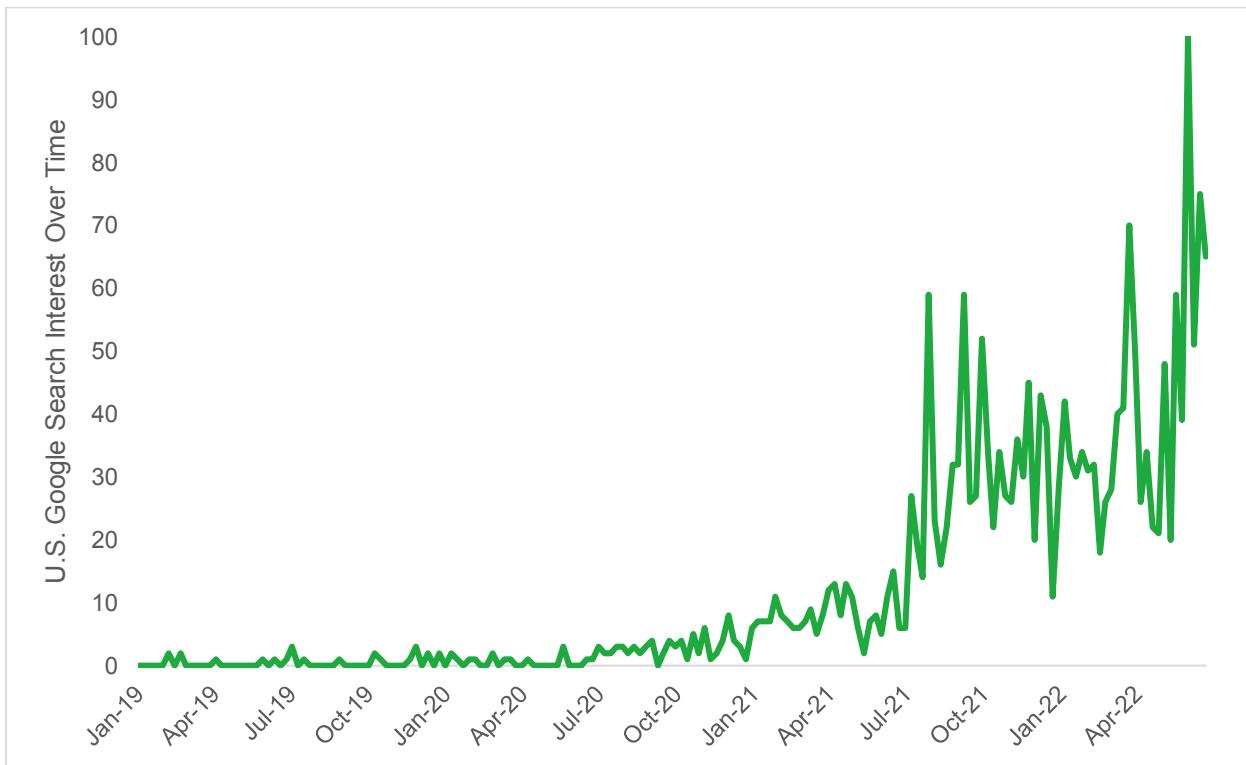
<sup>88</sup> United States Securities and Exchange Commission, *Form 10-Q for Sezzle Inc.* (June 30, 2022), available at <https://www.sec.gov/ix?doc=/Archives/edgar/data/0001662991/000166299122000027/szl-20220630.htm>

Cost of funds is calculated by dividing the Net Interest Expense (*i.e.*, borrowing costs to secure the funds necessary to originate BNPL loans) by the Underlying Merchant Sales (*i.e.*, GMV, or dollar originations). For Q2 ’21, the company’s Net Interest Expense was \$1.226 million and its Underlying Merchant Sales were \$411.112 million for a cost of funds of 0.30 percent. For Q2 ’22, those figures were \$1.670 million and \$419.062 million, respectively, for a cost of funds of 0.40 percent (33 percent higher than the 0.30 percent figure from Q2 ’21).

<sup>89</sup> A “down round” is defined as an equity raise for a privately held company in which the company’s implied valuation is lower than what it was on the previous equity raise. This is often interpreted as a sign of concern for the company and its investors, as subsequent equity rounds typically fetch higher valuations than prior ones.

in the product is also growing briskly, as evidenced the Google search trends for the term ‘bnpl’ displayed in Figure 7 below.<sup>90</sup>

**FIGURE 7: WEEKLY GOOGLE TRENDS INTEREST OVER TIME FOR “BNPL,” 2019 – H1 2022<sup>91</sup>**



(Source: Google Trends)

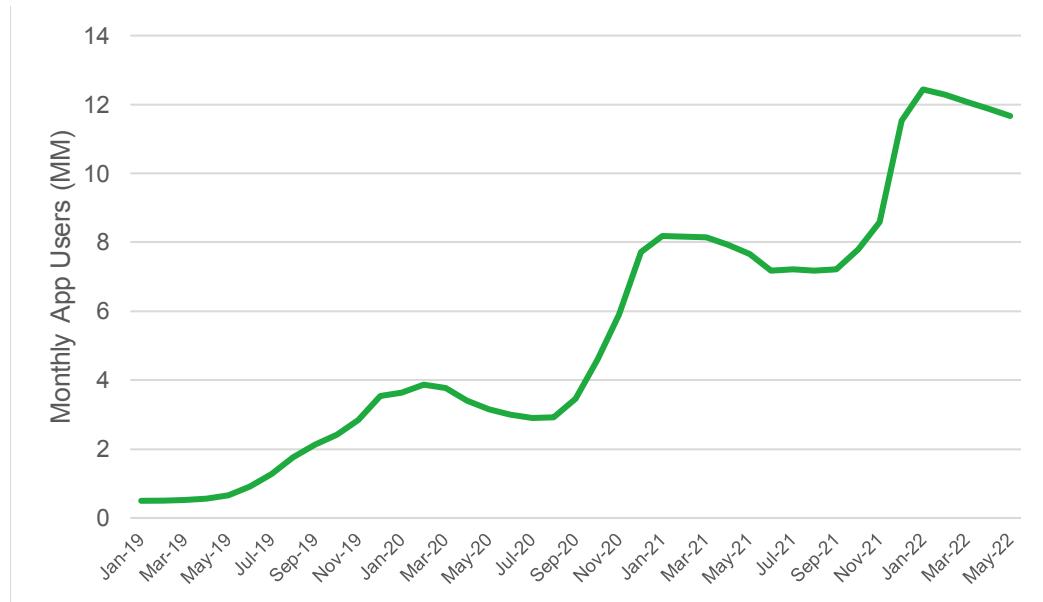
<sup>90</sup> Google Trends, *BNPL* (June 25, 2022), available at <https://trends.google.com/trends/explore?date=2019-01-01%202022-06-02&geo=US&q=bnpl>

Google’s Interest Over Time metric allows for norm-referenced analysis of a given term’s popularity over time. For the term(s) and time period specified, it sets a value of 100 to the highest-searched week, with all other weeks norming off of that point. It cannot be used to measure the absolute number of searches.

<sup>91</sup> 2022 data through the first 26 weeks of the year (ending July 2).

Another metric that supports this hypothesis of increasing consumer demand is the rapid growth of BNPL app usage. Figure 8 below shows the cumulative<sup>92</sup> monthly U.S. app usage for three of the four BNPL lenders surveyed who have proprietary apps:<sup>93</sup>

**FIGURE 8: CUMULATIVE MONTHLY U.S. APP USAGE FOR THREE BNPL LENDERS, JAN '19 – MAY '22**



(Source: Apptopia<sup>94</sup>)

While app usage did slightly decline following an all-time high in February 2022, this represented a seasonal trend rather than an intrinsic drop in demand. In fact, the 4.9 percent decline in monthly usage from February to May 2022 was less than the declines experienced in the same time periods in 2021 (6.3 percent) and 2020 (18.6 percent).

The preceding data points suggest a BNPL industry in flux. Consumer demand for the product is at record levels while unit margins face pressure on both the revenue and expense sides of the ledger and capital markets' general tolerance for unprofitable growth is waning. Lenders have responded to this confluence of events with adjustments to their business models, many of which have direct consequences for borrowers. The ensuing subsections highlight three such

<sup>92</sup> Because this chart is an aggregate of three lenders' distinct app usage figures, users who patronize the apps of multiple BNPL lenders in the same month would be counted multiple times.

<sup>93</sup> The fourth was omitted because, following its acquisition in 2021, it began combining its BNPL product features in the app of its parent company. As result, its proprietary app download data after that point is not fully representative of consumer demand for its product. Two of the three lenders whose data is included also offer longer term Point of Sale loans on their apps.

<sup>94</sup> Apptopia is a proprietary market intelligence and application analysis platform. <https://apptopia.com>

adjustments: tightening underwriting standards, higher consumer fees, and an increased focus on app-driven acquisitions traffic.<sup>95</sup> It is important to note that lenders have not acted uniformly on these three strategic shifts—some have not adopted one or more of them at all—but they do collectively represent shifts that are currently taking place and could accelerate given existing financial incentives.

### 4.3.1 Tightening underwriting standards

From Q3 '21 to Q4 '21, the credit approval rates for each of the five lenders surveyed declined; in aggregate, their approval rate dropped from 75 to 72 percent. Part of this effect was seasonal; approvals often decline in the fourth quarter, as credit-seeking holiday shoppers make up a disproportionate share of the applicant pool. But another part of it was the beginning of a trend that has accelerated since the start of 2022 to tighten underwriting standards in order to reverse worsening credit losses.

In June 2022, one BNPL lender confirmed that it was tightening underwriting as part of a “real focus on sustainable growth, strong unit economics and, critically, accelerating our pathway to profitability,” while another lender confirmed that it made similar underwriting adjustments “to reflect this evolving market context.”<sup>96</sup>

In its FY '22 annual report (published in August 2022, for the fiscal year that ran from July 2021 through June 2022), one of the lenders quoted in the prior paragraph provided some additional context to its policies changes: “[BNPL lender] has tightened its decisioning rules and cut off scores, enhanced credit limit management and optimised its approach to repayments and collections.”<sup>97</sup>

On its August 2022 earnings call, another BNPL lender detailed underwriting adjustments outside of the scope of reducing approval rates, including “tightening in durations, asking for a more down payment, in some cases, asking for incremental income information.”<sup>98</sup>

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<sup>95</sup> This section intentionally omits business shifts that primarily or solely impact the lenders’ employees and investors, as the focus of this report is on the net effects of BNPL on consumers.

<sup>96</sup> The Wall Street Journal, *Missed Payments, Rising Interest Rates Put ‘Buy Now, Pay Later’ to the Test* (June 1, 2022), available at <https://www.wsj.com/articles/missed-payments-rising-interest-rates-put-buy-now-pay-later-to-the-test-11654033930>.

<sup>97</sup> Zip.co, *FY22 RESULTS UPDATE* (August 25, 2022), available at <https://zip.co/investors/asx-announcements/>.

<sup>98</sup> The Motley Fool, *Affirm Holdings, Inc. (AFRM) Q4 2022 Earnings Call Transcript* (August 26, 2022), available at <https://www.fool.com/earnings/call-transcripts/2022/08/26/affirm-holdings-inc-afrm-q4-2022-earnings-call-tra/>.

### 4.3.2 Higher consumer fees

When legacy credit card issuers and other lenders who rely on interest income face rising costs, they may be able to pass those costs on to borrowers in the form of increased interest rates. With zero-interest loans, BNPL lenders do not have this option. Some lenders have, however, earned additional consumer revenue from other fees; namely, late fees and transaction fees.

In aggregate, the five lenders surveyed have increased their share of revenue coming from consumer fees, from 11.7 percent in 2020 to 13.4 percent in 2021. However, the shift was not consistent across the lenders: three experienced an increase, one experienced a decrease, while another did not charge consumer fees in either year.

The three lenders with increased consumer fee revenues did not raise the size of each late fee, but the number of consumers who paid late fees increased. For these lenders, the borrower-level late fee rate (see Section 3.3 for description) increased anywhere from 3 to 10 percent between 2020 and 2021.

Another means to increase consumer fee revenues without increasing nominal fee amounts is to collect a higher share of assessed fees, a strategy employed by one or more of the five lenders surveyed between 2020 and 2021.

### 4.3.3 Increased focus on the app-driven acquisition model

Many BNPL lenders have shifted to the app-driven acquisition model, partly in response to declining fees received from the merchant partner model.<sup>99</sup> The share of the five surveyed lenders' GMV from non-partnered merchants (who make up a large share of the app-driven model originations) has increased from 11 percent in 2019 to 16 percent in 2020 to 19 percent in 2021 (and 22 percent when exempting the one lender who did not originate any non-partnered loans in 2021). Meanwhile, the share of lenders' revenues derived from partnered merchants' discount fees declined from 78.9 percent in 2019 to 61.9 percent in 2021.

Those metrics belie the scope of the strategic shift at play. In the merchant partner acquisition model, BNPL lenders position their products as payment alternatives to credit cards to "pull" customers through the conversion funnel. In the app-driven model, lenders' primary role is as a

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<sup>99</sup> Affiliate/referral fees that drive revenues in the app-driven acquisition model have higher variance than merchant discount fees (MDFs) charged in the merchant acquisition model. One study noted that BNPL affiliate fees can range as high as 12 percent, which is significantly higher than the industry average pay-in-four MDF.

McKinsey and Company, *Buy now, pay later: Five business models to compete* (July 29, 2021), available at <https://www.mckinsey.com/industries/financial-services/our-insights/buy-now-pay-later-five-business-models-to-compete>.

marketing platform to “push” customers to retailers via referral clicks. The following quotes from BNPL executives underscore that positioning shift:

- “It’s like we[‘re] a marketing channel not a payment method. That’s key.”<sup>100</sup>
- “Much more of [BNPL lender’s] service would be classified as marketing and promotion than mere transaction processing.”<sup>101</sup>
- “We are fundamentally a marketing device for merchants.”<sup>102</sup>
- “[BNPL lender] becomes an end to end shopping service that caters to many needs - from inspiration and discovery to seamless post-purchase experiences.”<sup>103</sup>
- “We now speak as often to the chief marketing officer as we do the head of payments, and it’s because the value proposition has evolved.”<sup>104</sup>

On the surface, it is hard to draw a direct connection between lenders shifting from one source of merchant-based revenues to another and any effects on the average end user. However, a deeper review of the app-driven acquisition model reveals that it has the potential for far-reaching consumer impacts.

The following paragraphs detail four ways in which the app-driven acquisition model offers major consumer-facing differences from the merchant partner model: increased merchant availability, enhanced product discovery, enhanced user experience, and integration with ecommerce platforms and products.

### Increased merchant availability

In the merchant partner acquisition model, growth is constrained by the ability of BNPL lenders to sign up individual merchant clients. Traditionally, this required robust sales, engineering, and account management teams: the first group to bring in the clients, the second to handle the

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<sup>100</sup> Ecommerce Magazine, *Meet Afterpay: The Shop Now, Pay Later Method Used by Top Ecommerce Merchants* (March 18, 2019), available at <https://www.ecommerce-mag.com/afterpay-used-by-top-ecommerce-merchants>

<sup>101</sup> Australian Financial Review, *Afterpay, Zip fight back against surcharging* (December 1, 2019), available at <https://www.afr.com/companies/financial-services/afterpay-zip-fight-back-against-surcharging-20191201-p53ft8>

<sup>102</sup> Affirm, *FY 2021 Q3 Earnings Call* (May 10, 2021), available at <https://investors.affirm.com/static-files/8ea5ff32-0699-44fb-92fe-5cbd1c3e20ff>

<sup>103</sup> PR Newswire, *Next generation shopping: Klarna reveals the only shopping app consumers need* (November 3, 2021), available at <https://www.prnewswire.com/news-releases/next-generation-shopping-klarna-reveals-the-only-shopping-app-consumers-need-301415095.html>

<sup>104</sup> Fast Company, *Buy now, pay later services are retailers’ next great hope* (May 5, 2022), available at <https://www.fastcompany.com/90739769/buy-now-pay-later-services-are-retailers-next-great-hope>

technical integrations on the clients' websites that can be especially onerous for small- and medium-sized businesses, and the third to manage the ongoing relationships with those clients.

Partnerships between BNPL lenders and low- or no-code merchant platforms have helped to reduce these pain points and increase take-up,<sup>105</sup> but this model has a natural growth ceiling of merchants that are willing and able to agree to a lender's financial and technical terms.

The app-driven model directly addresses this merchant acquisition problem via the advent of issuer processor-facilitated virtual cards. Because those cards can be used on the major payment networks that almost all retailers accept, nearly any online merchant is eligible to accept BNPL.

The app-driven acquisition model has also significantly lowered the technical, logistical, and financial barriers for retailers to use BNPL as a marketing channel via the use of third-party affiliate networks. These networks bring together advertisers (*i.e.*, merchants selling consumer goods and services) and publishers (in this use case, BNPL lenders) in a real-time, automated auction for ad placements on the publishers' (BNPL lenders) apps and websites. Crucially, no specific lender-retailer contract is necessary. By participating in the network, the lender (and, as a result, the consumer) immediately has access to all of the retailers which also belong to that network, as one affiliate network explained, in a blog highlighting its relationship with BNPL clients:

*The [BNPL lender] app helps millions of customers shop at thousands of stores with their BNPL offering, as well as find great deals on the products they want every day, creating a seamless shopping experience with flexible payment options. Using the [Affiliate network] //Commerce API, [BNPL lender] monetizes the shopping experience by providing customers with access to our entire list of 30,000+ affiliate merchants. Every purchase made through the app earns [BNPL lender] an affiliate commission, and the breadth of discount programs ensures that app users will return again and again looking for the best deals.<sup>106</sup>*

The financial incentives for BNPL lenders to join these networks are strong. The aforementioned affiliate network, in the writeup of a case study done with another BNPL client, wrote that "the

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<sup>105</sup> See Affirm, *Affirm Partners with Shopify to Exclusively Power Shop Pay Installments in the U.S.* (July 22, 2020), available at <https://www.affirm.com/press/releases/affirm-to-power-shopify-shop-pay-installments>; and Reuters, *Affirm partners with Stripe to expand offering of buy now, pay later services* (May 31, 2022), available at <https://www.reuters.com/markets/us/affirm-partners-with-stripe-expand-offering-buy-now-pay-later-services-2022-05-31>

<sup>106</sup> sovrn, *Make More Bank with Buy-Now-Pay-Later (BNPL)* (January 27, 2022), available at <https://www.sovrn.com/blog/make-more-bank-with-buy-now-pay-later-bnpl>

number of clicks [BNPL lender] was able to affiliate [*i.e.*, monetize via affiliate fees] grew by 600%.”<sup>107</sup>

## Enhanced product discovery

Whereas, in the merchant partner acquisition model, BNPL lenders are reliant on consumers’ loyalty to specific retail brands, the app-driven model allows lenders to become brands in their own right. Consumers can visit a BNPL lender’s app with a specific transaction in mind, but many users arrive in the app without a pre-decided purchase path. Instead, these casual shoppers can browse the app and discover a wide array of products, services, and retailers.

To use an analogy from the world of brick-and-mortar retail: In the merchant partner model, BNPL lenders are a new cash register that helps merchants drive more sales within their own storefronts; in the app-driven model, the lenders are a shopping mall—an entry point to myriad retailers, and an attraction in and of itself. Some shoppers arrive at the mall knowing what they want to buy and from whom they want to buy it, others have a vague idea of what they’re looking for but are in search of inspiration, and some are just looking to have fun.

The analogy is not lost on the lenders themselves. As one explained in a blog detailing its value to merchants:

*Back in the day, shoppers were extremely loyal to their favorite retail centers; ‘let’s go to the good mall’ they’d say. While malls may not be the centerpiece of retail anymore, shoppers still prefer to remain within a trusted space with verified vendors. Users of shopping apps like...you guessed it—[BNPL lender name], are actively looking to use the benefits of flexible payment options at checkout wherever they can. Retailers offering BNPL options encourage those browsers to become buyers—and they do! [BNPL lender name] users, for example, have a 36% higher purchase frequency than regular shoppers.<sup>108</sup>*

The selection of available retailers for consumers to discover in these app-driven virtual malls—and how prominently the retailers are displayed—is not random. There are three primary ways that certain brands receive the highest-traffic app placements:

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<sup>107</sup> sovrn, *Zip Case Study* (August 2021), available at <https://info.sovrn.com/hubfs/Sovrn-Assets-2021/Zip%20Case%20Study%20Final.pdf>

<sup>108</sup> Klarna, *10 reasons your business shouldn’t snooze on buy-now-pay-later solutions* (July 6, 2021), available at <https://www.klarna.com/us/blog/why-use-buy-now-pay-later-klarna>

- Pay affiliate or “lead generation” fees—essentially a form of disguised advertising—to the lender for each purchase that originated from the preferred brand placement.
- Confer strategic partnership value to the lender (*i.e.*, a popular apparel retailer that can act as a “cornerstone” attraction, similar to a name-brand retailer getting a preferential rent deal at a brick-and-mortar mall).
- Be attractive to the specific app user based on the user’s behavioral surplus: pieces of consumer-provided or consumer-derived data that add value to models that predict the brands and products likeliest to elicit clicks and purchases.<sup>109</sup>

The first two bullets above form the foundation of the business case for the app-driven model, but the final bullet suggests the highest long-term value to BNPL lenders. Recent remarks from venture capital investors emphasize this point:

- “The one thing to remember about those companies is they have a lot of data. They know what consumers do. That’s valuable.”<sup>110</sup>
- “The cost to acquire is low, and BNPL providers have proprietary data in position to offer other data-driven services.”<sup>111</sup>

Behavioral surplus is the engine that powers complex personalization and targeting models for BNPL app placement, which in turn drive consumer engagement and incremental spending. In recent public statements, one lender specifically referenced the importance of “increased personalization of both in-App content and broader customer communications, delivering targeted messages, promotions and merchant content,”<sup>112</sup> while another noted that “personalized offerings” were one of the key contributing factors to “drive repeat use.”<sup>113</sup> A third lender, on a webpage detailing its sponsored ad placement offerings to prospective merchant clients, highlighted its “[s]egmented targeting capabilities [that] ensure your brand gets in front

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<sup>109</sup> The term “behavioral surplus” was first popularized by Shoshana Zuboff’s 2019 book *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*.

<sup>110</sup> Crunchbase, *BNPL Companies Face New Challenges As Incumbents Enter The Ring, Big Customers Shift Business Models* (March 21, 2022), available at <https://news.crunchbase.com/business/bnpl-startups-challenges-affirm-peloton-pton>

<sup>111</sup> Forbes, *Buy Now, Pay Later: The New Credit Card Acquisition Channel* (February 1, 2022), available at <https://www.forbes.com/sites/ronsheylin/2022/02/01/buy-now-pay-later-the-new-credit-card-acquisition-channel/>

<sup>112</sup> Zip, *Annual Report 2021* (August 2021), available at <https://zipco.colliercreative.com.au/wp-content/uploads/2021/09/Zip-AR21.pdf>

<sup>113</sup> United States Securities and Exchange Commission, *Form 10-K for Affirm Holdings, Inc.* (June 30, 2021), available at <https://www.sec.gov/ix?doc=/Archives/edgar/data/0001820953/000182095321000102/afrm-20210630.htm>

of the people you are most looking to attract” and a platform with over 20 million “high-intent shoppers.”<sup>114</sup>

The specificity of personalization and targeting models varies by lender. Three of the four lenders surveyed with proprietary apps use product-specific information, such as the item Stock Keeping Unit (SKU)—a unique identifier for each product a merchant sells—to gauge consumer propensity to engage with similar products in the future, while one uses only merchant category to target consumer preferences. The end result for the consumer is similar regardless of lender: past BNPL usage often determines which products and services have the most prominent in-app placement.<sup>115</sup>

BNPL apps may prove to be a promising medium for advertisers in the coming years. Both Apple and Google have announced that they will curtail the ability of advertisers to track users between apps (*i.e.*, “third-party” data collection and usage).<sup>116</sup> The companies will not, however, limit tech platforms’ abilities to track users *within* their apps (*i.e.*, “first-party” data collection and usage), which BNPL lenders often do. As a May 2022 article explains:

*Due to privacy changes, most notably the tracking restrictions that Apple made available to iPhone users in April 2021, retailers have not been able to target customers through platforms like Meta, which owns Facebook and Instagram, as they had before. Nor can they definitively attribute an e-commerce sale to a digital ad. BNPL companies, thanks to their increasingly robust apps and email lists, can solve both those problems. Moreover, they have an advantage over social media and digital advertising in understanding consumers’ credit, and, by extension, their buying power.*<sup>117</sup>

An academic research paper reinforced the notion that the April 2021 privacy changes referenced above will preference first-party data tracking over more traditional third-party tracking:

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<sup>114</sup> Klarna, *Sponsored placements* (2022), available at <https://www.klarna.com/us/business/marketing-solutions/sponsored-placements>

<sup>115</sup> Behavioral surplus data can also be used to optimize the content shown in email campaigns to previous BNPL consumers designed to spur repeat usage.

<sup>116</sup> *Apple Rolls Out Major New Privacy Protections For iPhones And iPads*, <https://www.npr.org/2021/04/26/990943261/apple-rolls-out-major-new-privacy-protections-for-iphones-and-ipads>; *Introducing the Privacy Sandbox on Android*, <https://blog.google/products/android/introducing-privacy-sandbox-android/>.

<sup>117</sup> *Buy now, pay later services are retailers’ next great hope*, <https://www.fastcompany.com/90739769/buy-now-pay-later-services-are-retailers-next-great-hope>

*It is worth emphasizing that ATT [App Tracking Transparency, Apple’s major privacy change announced in April 2021] only applies to third-party data and has no bearing on the use of first-party data for any company. Companies that do not use third-party data for advertising, do not track users, and do not share data with data brokers do not need to request permission from users under ATT...In fact, any such company would stand to benefit from ATT (not just Apple) as advertisers sought effective ad targeting based on first-party data.<sup>118</sup>*

## Enhanced user experience

The prior paragraphs detailed how lenders wield behavioral surplus to create a personalized shopping experience based on the products and brands that resonate most with each individual user. This subsection describes an additional behavioral surplus use case: collective user data, aggregated at scale to enhance the generic user experience (UX)—font, color scheme, word choice, etc.

The effectiveness of these UX tweaks (often captured through “A/B” or “champion/challenger” tests that pit a potential new feature against the status quo) is typically measured in seemingly small lifts to site visits and conversion that can confer long-term financial benefits. As one BNPL lender explained on a May 2022 earnings call:

*Throughout the quarter, we delivered several iterations of the [app]...Each such iteration delivered results, improving user engagement by about 3% and adding over 1% to our in-app transaction volume. These numbers may seem trivially small in comparison to some of our headline growth metrics, but obsessing over user experience that compounds, and we have many more iterations planned.<sup>119</sup>*

Tech executives prefer to describe their data-driven UX changes as “iterations” that “improv[e] user engagement,” but the term “dark patterns” (also sometimes referred to as “deceptive designs”) may be equally apt. While there is no single uniform standard for determining what constitutes a dark pattern, one news outlet recently defined it as “design that manipulates or

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<sup>118</sup> Columbia Business School, *Mobile Advertising and the Impact of Apple’s App Tracking Transparency Policy* (April 26, 2022), available at [https://www.apple.com/privacy/docs/Mobile\\_Advertising\\_and\\_the\\_Impact\\_of\\_Apples\\_App\\_Tracking\\_Transparency\\_Policy\\_April\\_2022.pdf](https://www.apple.com/privacy/docs/Mobile_Advertising_and_the_Impact_of_Apples_App_Tracking_Transparency_Policy_April_2022.pdf). The title page of the paper notes: “Funding for this white paper was provided by Apple, but the contents of the white paper reflect my opinions only. In forming these opinions, I relied only on publicly available information. I did not receive any private data or documentation from Apple.”

<sup>119</sup> Affirm, *Fiscal Year 2022 Third Quarter Earnings Conference Call* (May 12, 2022), available at <https://investors.affirm.com/static-files/710fed05-00b8-48b2-a866-ef5355724903>

heavily influences users to make certain choices.”<sup>120</sup> An academic paper cited in the ensuing paragraphs offered a similar definition: “Dark patterns are instances where designers exploit the knowledge of human behaviour (e.g., behavioural psychology) and cognition (e.g., cognitive psychology) in order to coerce the customers into performing target actions.”<sup>121</sup>

The spectrum of dark pattern usage across ecommerce can range from general behavioral optimization (*i.e.*, one shade of blue is more conducive to attracting user clicks than another shade) to UX flows that capitalize on specific types of user cognitive confusion. There are several archetypes of the latter, including disguised ads (“[a]dverts that are disguised as other kinds of content or navigation, in order to get you to click on them”) and trick questions (“[w]hile filling in a form you respond to a question that tricks you into giving an answer you didn’t intend”).<sup>122</sup>

In 2021, a researcher investigated the potential existence and effectiveness of dark patterns in BNPL.<sup>123</sup> To answer the first question of existence, the report examined randomly selected websites of merchant partners of two leading Swedish BNPL lenders (one of which has a significant presence in the U.S.) and found examples of ten different dark patterns being employed.<sup>124</sup>

To answer the second question of effectiveness, the report designed a controlled experiment by recreating two versions of the BNPL lenders’ checkout flow (stripped of any specific branding). The first version included seven of the ten empirically identified dark patterns, while the second “anti-dark-patterns” version was designed to be as neutral as possible to the enhancements that the dark patterns addressed.<sup>125</sup> The report found that 82 percent of respondents exposed to the

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<sup>120</sup> Vox Media, *Dark patterns, the tricks websites use to make you say yes, explained* (April 1, 2021), available at <https://www.vox.com/recode/22351108/dark-patterns-ui-web-design-privacy>

<sup>121</sup> Johannesson, Isabella, *Dark Patterns in Digital Buy Now Pay Later Services*, KTH Royal Institute of Technology (2021), available at <http://kth.diva-portal.org/smash/get/diva2:1588606/FULLTEXT01.pdf>.

<sup>122</sup> Deceptive Design, *Types of Deceptive Design* (2022), available at <https://www.deceptive.design/types>

<sup>123</sup> Johannesson

<sup>124</sup> *Id.* The breakdown of the ten identified dark patterns was as follows: one was based on color (defined as “overshadowing the non-target action by using a higher contrast colour scheme for the target action”), four were based on “false hierarchy” (defined as “interactive precedence over the non target actions, in instances where the target action is visualised hierarchical rather than parallel”), one was based on “hidden information” (defined as “hiding the non-target action, making it not immediately or readily accessible”), two were based on “preselection” (defined as “the target action being selected by default previous to user interaction”), and two were based on “nagging” (defined as “the minor redirection of an expected outcome, and is often repeated intrusion where the designers are steering the user away from nontarget actions, into their own target actions through nagging”).

<sup>125</sup> *Id.*

dark-pattern-enhanced UX selected BNPL as their purchase option, while only 59 percent of the respondents exposed to the control “anti-dark-pattern” UX made the same selection.<sup>126</sup>

Another resource that provides an insightful look at how and why UX designers employ dark patterns for financial gain is a 2017 research report commissioned by a European-based BNPL lender (that now has a significant presence in the U.S.) entitled “Emotional eCommerce: Ups and downs in the online experience.”<sup>127</sup> The report, written for a broad audience of e-retailers, tech platforms, and lenders, asserts that “[c]reating small experiential ‘nudges’ at the digital point of sale has the potential to significantly boost business.”<sup>128</sup>

“Often resulting from lapses of self-control, inner strength or resolve,” the authors write, “unplanned purchases can be lucrative for retailers. The less the customer is required to think about inputting data, the more likely they are to make a purchase without too much consideration.”<sup>129</sup>

The paper posits specific examples of UX recommendations to “enhance impulsive purchases,” including:

- “Collect information to tailor the website experience to the consumer, product and device”
- “Ensure fluency so that the transition to the checkout page does not cause an emotional purchase to switch to a logical one”
- “Address gender imbalance by increasing the social presence of a website to attract more women;” and
- “Increase payment choice by offering alternative options such as deferred payments...for example [BNPL lender’s products].”<sup>130</sup>

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<sup>126</sup> *Id.*

<sup>127</sup> Bell, Lynne, Vogt, Julia, and Rachel McCloy, *Emotional eCommerce*, University of Reading and Klarna (July 2017), available at [https://www.klarna.com/assets/sites/3/2020/01/07094907/emotionaleCommerce\\_Reading\\_Klarna.pdf](https://www.klarna.com/assets/sites/3/2020/01/07094907/emotionaleCommerce_Reading_Klarna.pdf).

<sup>128</sup> *Id*

<sup>129</sup> *Id*

<sup>130</sup> *Id*

## Integration with ecommerce and payments platforms and products

BNPL lenders have also increased the scope of their apps via integrations with platforms and products that were originally created for generic payments and ecommerce. Five examples are detailed below: browser extensions, payment apps, social commerce, in-house rewards programs, and physical cards.

### ***Browser extensions***

At their core, browser extensions are small, easily installed pieces of software that customize the desktop web browsing experience (usually by expediting a user’s access to a given product or service), and the mechanics of those utilized by BNPL lenders are no different. Available for download from lenders’ own websites or a browser’s web store, BNPL browser extensions can automatically turn the offerings on a retailer’s website into BNPL loans with a single mouse click.

This product enhancement expands the availability of non-partnered merchants (an advent of the app-driven model) to desktop users—a demographic who, in 2021, still accounted for 60 percent of ecommerce sales.<sup>131</sup> At the time of this report’s publication, three major U.S. BNPL lenders have browser extensions.

### ***Payment apps***

When a large tech company specializing in retail and peer-to-peer payments acquired a BNPL lender in 2021, it justified the eleven-figure price tag as a natural synergy with its existing payments app. Its investor presentation highlighted the BNPL lender’s key value drivers of “[i]n-app shopping discovery,” and laid out a path to a unified payments-and-BNPL app “to help drive lead generation for merchants and consumer engagement.”<sup>132</sup>

The parent company’s CEO reiterated the value of wedding payments and BNPL into a single app in an August 2022 earnings call: “[BNPL product] will introduce discovery and shopping to build on the elements that [app that includes payments and BNPL] has already created around

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<sup>131</sup> eMarketer, *Ecommerce shoppers are moving to mobile* (February 15, 2022), available at <https://www.emarketer.com/content/ecommerce-shoppers-moving-mobile>

<sup>132</sup> Square and Afterpay, *Square Adds Afterpay to Seller and Cash App, Connecting its Ecosystems* (August 2021), available at [https://s27.q4cdn.com/311240100/files/doc\\_financials/2021/q2/Square-Plans-to-Acquire-Afterpay-Transaction-Overview.pdf](https://s27.q4cdn.com/311240100/files/doc_financials/2021/q2/Square-Plans-to-Acquire-Afterpay-Transaction-Overview.pdf)

commerce...We believe our new design with [app that includes payments and BNPL] will let us scale new products and drive deeper engagement.”<sup>133</sup>

The CFPB’s recently published report on the convergence of payments and commerce provides further context on this topic.<sup>134</sup>

### **Social commerce**

BNPL lenders have recently entered into the realm of social commerce: shopping that occurs directly in social media feeds or on content publishers’ platforms. The scope of social commerce is already massive: according to one market estimate, there were over 90 million unique U.S. social commerce buyers in 2021.<sup>135</sup>

One lender used a January 2022 blog post to lay out a clear case to merchants as to the effects of combining social commerce with BNPL on customer conversion:

*The shopper never leaves the app. As a result, there’s no opportunity for a shopper to get distracted on the way to your website. They don’t have to type your product’s name into Google, where they’ll be greeted with paid ads from your competitors. Instead, the immediacy of social in-app shopping — and the near absence of friction — prevents shoppers from thinking twice before they buy. That means more sales for ecommerce retailers.*

*Pro Tip: Social commerce offers such a simplified checkout experience that retailers only have one potential hurdle to overcome: price. That’s where Buy Now, Pay Later can help. BNPL splits a shopper’s cart total into four easy payments, making a purchase seem much more manageable.*<sup>136</sup>

A few months prior, another BNPL lender secured a partnership with a social commerce-focused checkout platform. At the announcement of the partnership, the platform stated that

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<sup>133</sup> The Motley Fool, *Block, Inc. Q2 2022 Earnings Call Transcript* (August 5, 2022), available at <https://www.fool.com/earnings/call-transcripts/2022/08/05/block-inc-sq-q2-2022-earnings-call-transcript>

<sup>134</sup> Consumer Financial Protection Bureau, *The Convergence of Payments and Commerce: Implications for Consumers* (August 4, 2022), available at <https://www.consumerfinance.gov/data-research/research-reports/the-convergence-of-payments-and-commerce-implications-for-consumers>

<sup>135</sup> eMarketer, *Social Commerce 2021: Media and Commerce Convergence Creates Growth Opportunity for Brands* (February 3, 2021), available at <https://www.emarketer.com/content/social-commerce-2021>

<sup>136</sup> Zip, *How to Leverage Social Commerce for Retail* (January 5, 2022), available at <https://zip.co/us/merchant-hub/retail-insights/instagram-tiktok-in-app-shopping-for-retailers>

“we’re building a native commerce ecosystem that brings publishers...merchants and consumers together at the right moment, and with the right payment options available to them [consumers], to make online purchasing truly seamless.”<sup>137</sup>

### **Rewards programs**

Several major BNPL lenders have developed proprietary rewards programs.<sup>138</sup> The BNPL rewards programs combine cash-back offers from specific retailers (similar to rewards programs offered by legacy credit card issuers) with the ability for consumers to “unlock” additional rewards when certain usage thresholds are met.<sup>139</sup> One company’s highest rewards tier includes the “[o]ption to change up to six...payment dates per calendar year” and the ability to not have to make any up-front payment on “eligible orders of \$400 or less.”<sup>140</sup>

These programs often include partnerships with legacy and upstart rewards vendors. In December 2021, one BNPL lender announced a partnership with a two-decade-old rewards platform that “combines cash-back rewards and flexible payment schedules,” with a goal of “help[ing] retailers attract high-value shoppers and increase their sales.”<sup>141</sup>

Another BNPL lender partners with a “card linking” platform that allows retailers and tech companies to quickly deploy data-driven rewards programs linked to a user’s existing debit or credit card. This vendor’s technology is especially useful for offering targeted rewards campaigns that only apply to certain purchases. The terms and conditions on one merchant partner’s website explain:

*[BNPL lender] will receive your card details and information about the transactions you make when you use the linked card to purchase goods or services with a store participating in [BNPL lender’s] loyalty program connected to this service...[BNPL*

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<sup>137</sup> PYMNTS, *Bonsai, Afterpay Team on BNPL Program for Online Publishers* (October 13, 2021), available at <https://www.pymnts.com/bnpl/2021/bonsai-afterpay-team-on-bnpl-program-for-online-publishers>

<sup>138</sup> Klarna, *Rewards* (2022), available at <https://www.klarna.com/us/rewards> and Afterpay, *Pulse Rewards* (2022), available at <https://www.afterpay.com/en-US/loyalty-opt-in>

<sup>139</sup> It is important to clarify that retailers do not need to have a direct technical integration with a BNPL lender to engage in these cash-back programs. By partnering with affiliate marketplaces (discussed in Section 4) and other data linking vendors, BNPL lenders have enabled merchants who already use those marketplaces to avail themselves of cash-back offers without any additional engineering work.

<sup>140</sup> Afterpay, *Afterpay US Loyalty Program (“Pulse by Afterpay”) Terms & Conditions* (March 2022), available at <https://www.afterpay.com/en-US/loyalty-terms>

<sup>141</sup> PYMNTS, *Rakuten, Afterpay Combine BNPL, Cash-Back Rewards* (December 6, 2021), available at <https://www.pymnts.com/news/retail/2021/rakuten-afterpay-combine-bnpl-cash-back-rewards>

*[lender] will review transactions you have made with participating stores, to decide whether the transactions should qualify for a reward.*<sup>142</sup>

### ***Physical cards***

Some BNPL lenders have launched, or are in the process of launching, physical cards, which may enable more in-store usage. “Take Pay in 4 anywhere,” one lender’s webpage describing the product reads.<sup>143</sup> Typically, the consumer preemptively links an existing bank account or debit card, which is used to repay purchases made on the BNPL card. Some BNPL cards are structured to turn each transaction into a pay-in-four loan,<sup>144</sup> while others allow the consumer to designate a given transaction as pay-in-full or pay-in-four.<sup>145</sup>

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By enhancing the breadth and depth of their relationships with consumers through the aforementioned channels, BNPL lenders employing an app-driven strategy have been able to quickly build their own consumer brands and establish a foothold in the business of “lead generation:” providing companies with potential customers.

Table 12 on the following page indicates the impacts of this effective brand-building by comparing the average monthly U.S. app usage for the first five months of 2022 for BNPL lenders against legacy credit card issuers (split out by those who are also large banks<sup>146</sup> and those who primarily focus on credit cards):

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<sup>142</sup> Gelstory, *Klarna Payments & Terms and Conditions* (2022), available at <https://www.gelstory.co.uk/pages/klarna-payments-terms-and-conditions>

<sup>143</sup> Klarna, *Klarna Card* (2022), available at <https://www.klarna.com/us/klarna-card/>

<sup>144</sup> *Id.*, see also Zip, *Zip Card* (2022), available at <https://zip.co/us/zip-card>

<sup>145</sup> Affirm, *Debit+*, available at <https://www.affirm.com/debit>

<sup>146</sup> For the purposes of this study, “large bank” is defined as one with over \$1 trillion in domestic assets. Federal Reserve, *Large Commercial Banks* (March 31, 2022), available at <https://www.federalreserve.gov/releases/lbr/current/default.htm>

**TABLE 12: TOP 10 COMPANIES BY AVERAGE MONTHLY APP USERS (MM), BNPL AND CREDIT CARD ISSUERS, JANUARY – MAY 2022**

Company Type	Average Monthly App Users, Jan-May 2022 (MM)
1 Credit Card Issuer and Large Bank A	4.4
2 BNPL Lender A	3.6
3 BNPL Lender B	3.5
4 Credit Card Issuer and Large Bank B	3.5
5 Credit Card Issuer and Large Bank C	3.2
6 Credit Card Issuer A	3.0
7 BNPL Lender C	2.7
8 Credit Card Issuer and Large Bank D	2.2
9 Credit Card Issuer B	1.9
10 Credit Card Issuer C	1.5

(Source: Apptopia)

The top two BNPL lenders by monthly app users are exceeded by only a single credit card issuer. However, that card issuer also has over \$1 trillion in domestic assets, implying that everyday banking needs comprise a significant share of its app usage. No credit card issuer with under \$1 trillion in domestic assets came within five hundred thousand average monthly app users of either of the top two BNPL lenders.

BNPL lenders' shift toward proprietary app usage reinforces the common-sense notion that, when it comes to driving online purchase conversion, there is a strong financial incentive for a tech platform to expand its "home field advantage:" the extent to which it can keep a user on its own desired UX path. As one submission to the CFPB's public BNPL request for comment put it: "The BNPL model combines consumer surveillance, AI-driven data analytics, personalization, deep integration across platforms, retailers and applications, and real-time effects."<sup>147</sup>

That submission also offered an assessment of the consumer impact of the data-driven ecosystem that BNPL lenders have fostered: "We believe it will create an unfair and potentially

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<sup>147</sup> Comment from U.S. Public Interest Research Group (U.S. PIRG) (March 28, 2022), available at <https://www.regulations.gov/comment/CFPB-2022-0002-0038>

costly environment for consumers, who are being lured—as BNPL companies openly claim—into spending more money at greater frequency.”<sup>148</sup>

The next section of this report evaluates this assessment and comes to a similar conclusion: repeat BNPL usage—enhanced by the “home field advantage” features in lenders’ proprietary apps—can confer significant financial and operational benefits over other legacy credit products, but also may contribute to significant long-term harms.

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<sup>148</sup> Id.

# 5. BNPL and Consumer Financial Health

## 5.1 Introduction

At their core, the benefits and risks that BNPL provides borrowers are two sides of the same coin, one that defines much of today’s digital and mobile experiences: *free and seamless*. More than just a phrase, it encapsulates a high-level business strategy shared by many of the largest and most recognizable tech companies: Google, Facebook, Pinterest, and Robinhood, to name a few. All are ostensibly costless to end users (“free”) but earn revenue by taking small cuts of each transaction executed on their platforms by those users. The volume of the transactions is enhanced by low-friction, data-driven user interfaces (“seamless”).

Like their “free-and-seamless” peers listed above, BNPL lenders offer an easy-to-access, interest-free product, one that is increasingly packaged in an app-driven format that enriches the user experience and the behavioral-data-driven feedback loop. However, these same features that make BNPL popular may present risks to borrowers’ short- and long-term financial health.

## 5.2 Benefits

### 5.2.1 Financial benefits

BNPL lenders often seek to differentiate their offerings from legacy credit products and the direct financial costs that those products impose on borrowers. For example, one lender decried “credit cards and other products with deferred interest” that “peddle toxic financial products and derive profit from their consumers’ missteps.”<sup>149</sup>

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<sup>149</sup> United States Securities and Exchange Commission, *Form S-1 for Affirm Holdings, Inc.* (January 11, 2021), available at [https://www.sec.gov/Archives/edgar/data/1820953/000110465921002724/tm2026663-17\\_s1a.htm](https://www.sec.gov/Archives/edgar/data/1820953/000110465921002724/tm2026663-17_s1a.htm)

The CFPB's 2021 report on the consumer credit card market found that the total cost of credit was 17.7 percent for revolving cardholders on general purpose cards.<sup>150</sup> A CFPB blog post from January 2022 also estimated that Americans pay roughly \$120 billion per year in credit card interest and fees.<sup>151</sup>

By contrast, BNPL is typically a no-interest product. Borrowers who miss BNPL payments may be prohibited from future use until they repay or face late fees, but those fees are relatively low in absolute terms and do not compound as does credit card interest. Consequently, BNPL can be a low-cost alternative to other credit products.

The BNPL industry also posits that the product, unlike a typical general-purpose credit card, is not debt-cycle-inducing. Because BNPL lenders underwrite each purchase individually and do not charge interest, they argue that they have incentive-aligned, debt-cycle-preventing guardrails.

As stated in one company's 2021 annual report:

*When a consumer chooses [BNPL lender] for the first time, we give consumers a small line of credit, usually around USD 100. Then we do a new assessment for each and every transaction they make. We see that consumers can use the product responsibly before we make small increases in the amount available to them. This is why 99% of our lending is repaid and our losses are below the card industry standard. This also means that on average a consumer in arrears will owe us USD 100 compared to a US consumer who on average will have an outstanding balance of over USD 5,000 on their traditional credit card.<sup>152</sup>*

Another BNPL lender echoed similar themes in June 2022:

*We believe that by making every transaction an explicit borrowing event, we don't just protect [BNPL lender] from excess risk, we protect our borrowers from overextending themselves. Every time you want to use [BNPL lender] to buy something, you have to*

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<sup>150</sup> "Total cost of credit captures the totality of payments by consumers to issuers as an annualized percentage of cycle-ending balances on their accounts."

Consumer Financial Protection Bureau, *The Consumer Credit Card Market* pg. 46 (September 2021), available at [https://files.consumerfinance.gov/f/documents/cfpb\\_consumer-credit-card-market-report\\_2021.pdf](https://files.consumerfinance.gov/f/documents/cfpb_consumer-credit-card-market-report_2021.pdf)

<sup>151</sup> Consumer Financial Protection Bureau, *Americans pay \$120 billion in credit card interest and fees each year* (January 19, 2022), available at <https://www.consumerfinance.gov/about-us/blog/americans-pay-120-billion-in-credit-card-interest-and-fees-each-year>

<sup>152</sup> Klarna, *Full Year Results 2021* (December 2021), available at <https://www.klarna.com/assets/sites/15/2022/02/27195201/Klarna-Full-Year-Results-2021-EN.pdf>

*ask (or apply, in credit lingo) to be approved for that specific transaction. Sure, we make it easy and convenient to ask, but we will still look at your credit situation at that very moment and decide – and if we believe you won't be able to pay off your loan, we will, in fact, decline your application – with compassion and transparency – without fail.<sup>153</sup>*

These statements, and the strategies and models that underlie them, may help to explain BNPL lenders' low credit losses but do not provide long-term data on BNPL borrowers' overall financial health, including and especially on non-BNPL financial obligations.

In summary: a review of the claims that BNPL lenders make about financial benefits reveals one indisputable fact and one unproven hypothesis. The fact is that BNPL imposes significantly lower direct financial costs on consumers than legacy credit products. The hypothesis is that the nature of the product structure and underwriting strategy minimizes the likelihood of BNPL inducing overspending and debt cycles. Section 5.3 analyzes this hypothesis in more depth.

## 5.2.2 Operational and UX benefits

Compared to legacy credit predecessors, BNPL offers an easy-to-use, accessible product. Some of its distinguishing features that contribute to its seamlessness include:

- A short list of required user inputs
- An instantaneous credit decision
- A high credit approval rate
- A straightforward repayment structure
- In the merchant partner acquisition model: an application and checkout process embedded in a merchant's website
- In the app-driven acquisition model: a discovery engine that allows users to instantly browse from dozens of products and brands (which often becomes tailored to the interests and tastes of the individual user)

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<sup>153</sup> Affirm, *Underwrite or Lose (Money)!* (June 3, 2022), available at <https://investors.affirm.com/news-releases/news-release-details/underwrite-or-lose-money-max-levchin>

However, the same factors driving these operational and UX benefits may also lead to consumer risk via two distinct forms of overextension. The ensuing subsection details those risks.

## 5.3 Overextension Risks

BNPL lenders promote their value proposition to retailers with the phrase *incremental sales*, defined as retail revenue generated because of their platforms that would not have occurred without them. Indeed, they often present data to support this incremental sales assertion, as evidenced by the following metrics directed toward merchants:

- “85% higher merchant AOV [Average Order Value] compared to other payment methods”<sup>154</sup>
- “[BNPL lender’s] omnichannel shoppers spend 72% MORE per transaction than online shoppers”<sup>155</sup>
- “41% increase in average order value”; “30% increase in conversion”; “Up to 40% of [BNPL lender’s] sales come from new customers”<sup>156</sup>
- “56% increase in average order value”; “21% share of sales”; “65% of [BNPL] spend is from repeat users”<sup>157</sup>
- “20% increase in conversion and topline sales”; “80% increase in repeat customer rate”; “60% increase in AOV”<sup>158</sup>

These data points suggest that many BNPL consumers may not be simply shifting their existing purchases to a new payment platform; they may be spending (and borrowing) more than they otherwise would.

One specific metric is of particular interest to lenders in driving incremental sales: repeat usage. The empirical data from Section 3 demonstrated that the average BNPL borrower’s usage frequency has been steadily increasing over the three-year period studied, as has the share of

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<sup>154</sup> Affirm, *Fiscal Q4 2021 Investor Presentation* (2021), available at <https://investors.affirm.com/static-files/18f24d87-9ccd-4e3d-9253-dff937441677>

<sup>155</sup> Afterpay, *For Retailers* (2022), available at <https://www.afterpay.com/en-US/for-retailers/stores>

<sup>156</sup> Klarna, *Klarna for Business* (2022), available at <https://www.klarna.com/us/business>

<sup>157</sup> PayPal, *Buy Now, Pay Later* (2022), available at <https://www.paypal.com/us/business/enterprise/buy-now-pay-later>

<sup>158</sup> Zip, *For Businesses* (2022), available at <https://zip.co/us/for-businesses/checkout>

borrowers using the product five- and ten-plus times in a given quarter. The business strategies discussed in Section 4, coupled with lenders' incremental sales metrics referenced in the prior paragraphs, point to a conclusion that, rather than a coincidence or a bug, repeat usage is a critical feature of the BNPL product—as it is for many other “free-and-seamless” platforms.

In addition to their metrics intended for merchants, BNPL lenders often emphasize repeat usage to investors—the group that ultimately determines lenders’ valuations. As one BNPL lender stated in a 2021 investor presentation: “Customer loyalty and frequency drives [a] powerful network effect, securing the lifetime value of a customer.”<sup>159</sup> On a recent earnings call, another BNPL lender offered a similarly clear relationship between repeat usage and top-line growth: “We are especially proud of the re-engagement we are driving with consumers as 81% of our transactions were from repeat...users.”<sup>160</sup>

For many borrowers, this incremental consumption (much of which stems from repeat usage) may not result in negative short- or long-term financial ramifications. However, a subset of the BNPL borrower base is at risk of overextension, which can manifest itself in two distinct forms: loan stacking and sustained usage.

### 5.3.1 Loan Stacking

*Loan stacking* is the risk that a borrower takes out concurrent BNPL loans at different lenders and is unable to repay some or all of them. BNPL’s “free-and-seamless” product structure may contribute to this borrower behavior in the form of its low financial and operational burdens. The typical BNPL purchase only requires a 25 percent down payment with no interest, and the product is often available from several lenders at virtually every digital retailer. Additionally, because most BNPL lenders only make “soft” credit bureau inquiries, BNPL lenders have no visibility into an applicant’s borrowing activity on other BNPL platforms.

BNPL lenders often point to their low-and-grow strategies of assigning low credit amounts to first-time borrowers that slowly increase over time with on-time payments as evidence of appropriate usage guardrails. However, these guardrails can erode if borrowers have access to concurrent BNPL loans from several lenders. Even if the credit extended by any single lender does not exceed a few hundred dollars, the ease with which an applicant could borrow that much from multiple BNPL lenders within a short time frame could quickly affect their financial health.

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<sup>159</sup> Afterpay, *H1 FY21 Results Presentation* (February 25, 2021), available at <https://afterpay-corporate.yourcreative.com.au/wp-content/uploads/2021/03/H1-FY21-Afterpay-Results-presentation-Amplify-1129pm-sm.pdf>

<sup>160</sup> Affirm, *FY Q3 2022 Earnings* (2021) available at <https://investors.affirm.com/static-files/888a28b9-b279-4037-b7f2-a8b27378e677>

Consumer advocates have voiced worries about the financial risks posed by loan stacking, particularly since BNPL lenders historically have not furnished loan performance data to the NCRCs. As one submission to the CFPB’s public request for comment argued, “even with credit checking, lenders (BNPL or other lenders) have no lens into how much BNPL debt borrowers are carrying.”<sup>161</sup>

Reducing any loan stacking that may exist—and the credit losses that come with it—should be in lenders’ direct financial interest but requires a coordinated effort across lenders to provide the near-real-time data necessary.

### 5.3.2 Sustained Usage

*Sustained usage* is the risk that frequent BNPL usage may threaten borrowers’ ability to meet non-BNPL financial obligations, such as rent, utilities, mortgages, auto loans, and student loans. Unlike loan stacking, which can occur almost instantly, sustained usage may take months or even years to fully appear.

The risk of sustained usage is borne not on those who don’t repay their BNPL debts but on those who *do*. As discussed in Section 3, delinquent BNPL borrowers are usually cut off from future use with that lender (at least until they repay their outstanding debts). Conversely, it is the habitual borrower who has continual access to an often-increasing amount of BNPL credit and personalized product discovery engine.

Sustained usage is not unique to the BNPL industry. However, there are several indications, both from comparisons to other consumer lending industries and from the structure of the product itself, that BNPL may amplify these risks.

In 2017, a study published by one of the NCRCs found that consumers with at least one active personal loan, auto loan, mortgage, and credit card prioritized the personal loan payments above the other three, a result that surprised the study’s authors.<sup>162</sup> Unlike mortgages and auto

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<sup>161</sup> Comment from Center for Responsible Lending (March 25, 2022) available at <https://www.regulations.gov/comment/CFPB-2022-0002-0028>

<sup>162</sup> TransUnion, *Consumers Place Personal Loans Atop the Credit Mountain* (May 17, 2017), available at <https://newsroom.transunion.com/consumers-place-personal-loans-atop-the-credit-mountain>

The NCRC repeated the study, albeit in abbreviated form, to test the impact of Covid-19 on payment hierarchies in several markets worldwide. The updated study (<https://www.transunion.com/videos/a-shift-in-the-consumer-payment-hierarchy>) only compared personal loans against credit cards, but it did find that (in the U.S. at least) personal loans again retained a clear payment hierarchy preference both before and during the pandemic (1.5 percent delinquency rate versus 2.9 percent for credit cards in September 2019; 1.1 percent versus 1.8 percent for credit cards in September 2020).

loans, personal loans are not secured by valuable personal property. And unlike credit cards, which offer access to future credit, personal loans have virtually no future utility.

There are two hypotheses that attempt to explain why consumers put personal loans at the top of their payment hierarchy (*i.e.*, prioritized those payments) over other debts with far higher consequences attached to nonpayment. First: owing to its fixed monthly installment payment amounts, personal lenders have a strong incentive to require autopay, which increases the “stickiness” of its payments.<sup>163</sup> Second: by virtue of being smaller (on average) compared to auto loans and mortgages, personal loans often have lower monthly payments. For some consumers, the prospect of making a full payment on a personal loan may be more attractive than making partial payments on an auto loan or mortgage.

The structure of the BNPL product is closely aligned to personal loans—which came out on top of the payment hierarchy from the 2017 NCRC study—in two important ways.<sup>164</sup> First, autopay is not only encouraged; for BNPL most lenders, it is a de facto requirement. As an example: one of the five lenders surveyed noted that just 0.1 percent of active loans did not have a credit or debit card on file (a proxy for being “off” of autopay). Second, BNPL payment amounts are smaller than many other credit products. An average order value of \$135 (in 2021, per the five lenders surveyed, see Section 4) equates to four installments of less than \$35 each. Many consumers facing a difficulty in repaying several concurrent debts may still have sufficient funds in their account to cover their BNPL installments.

In addition to these similarities, BNPL has several distinguishing attributes from personal loans (and other legacy credit products) that are designed to increase the product’s overall desirability and attractiveness, and likelihood for habitual reuse. Those include rewards programs, in-app discovery engines, and dark-pattern- and individual-behavior-enhanced app features designed to maximize conversion and consumption, all of which were detailed in Section 4.3.

In Australia, where BNPL lending has a longer history, there have been several quantitative and qualitative studies that substantiate the hypothesis that the product can lead to sustained usage. One study, published by the Australian Securities & Investments Commission (ASIC), found that, “In the last 12 months, in order to make their buy now pay later payments on time: 20% of

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<sup>163</sup> Many lenders, including personal lenders, offer the incentive of an APR discount for enrolling in autopay.

CNBC, *4 personal loan lenders that offer an interest rate discount for signing up for autopay* (June 2, 2022), available at <https://www.cnbc.com/select/personal-loan-lenders-offer-autopay-apr-discount>

<sup>164</sup> TransUnion, Consumers Place Personal Loans Atop the Credit Mountain

consumers surveyed said they cut back on or went without essentials (e.g., meals); and 15% of consumers surveyed said they had taken out an additional loan.”<sup>165</sup>

Another report, from an Australian consumer advocacy group submitted to the CFPB’s public request for information, asserted that “[t]he BNPL model can create an additional incentive for consumers to make their BNPL repayments – it keeps their account open, and can lead to purchase limit increases.”<sup>166</sup> The submission provided additional details on one frequent BNPL borrower who was “struggling to manage debts accrued from utility bills, a car loan, a credit card, insurance and multiple BNPL debts.”<sup>167</sup> The submission noted that the consumer “likely had high BNPL credit limits because she had consistently made her repayments, which disguised her financial hardship.”<sup>168</sup>

In the United States, some consumer surveys have indicated that between 20 and 50 percent of BNPL consumers regret their purchases.<sup>169</sup> While the term “regret” could apply to many aspects

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<sup>165</sup> Australian Securities and Investments Commission, *Buy now pay later: An industry update* (November 2020), available at <https://download ASIC.gov.au/media/5852893/rep672-published-16-november-2020-2.pdf>

This study was performed on consumers of six lenders with a significant presence in Australia (two of whom were also recipients of the CFPB’s December 2021 market monitoring orders). Some of the lenders surveyed also originate longer term POS loans that the CFPB terms as outside of the scope of BNPL, but given that one lender—who only originates BNPL loans—accounted for 73 percent of the loan volume from the study, it is reasonable to conclude that pay-in-four borrowers represent a large majority of the customers surveyed.

<sup>166</sup> *Comment from Financial Counselling Australia and Consumer Action Law Centre* (March 25, 2022), available at <https://www.regulations.gov/comment/CFPB-2022-0002-0008>

<sup>167</sup> *Id*

<sup>168</sup> *Id*

<sup>169</sup> There are numerous consumer surveys on the topic of BNPL-induced, post-purchase regret. See, among others: Barclays, *Barclays calls for more robust regulation of all buy-now-pay-later products* (February 2022), available at <https://home.barclays/news/press-releases/2022/02/-barclays-calls-for-more-robust-regulation-of-all-buy-now-pay-la>

C+R Research, *Buy Now, Pay Later Statistics And User Habits* (April 2021), available at [https://www.crreresearch.com/blog/buy\\_now\\_pay\\_later\\_statistics](https://www.crreresearch.com/blog/buy_now_pay_later_statistics)

Auriemma Research, *Buy Now, Pay Later Plans Holiday Shopping, Two-Factor Authentication and Fraud* (February 2022), available on request.

DebtHammer, *Survey: Buy Now Pay Later Plans Fuel Debt Struggles* (February 27, 2022), available at <https://debthammer.org/buy-now-pay-later-survey>

Citizens Advice, *Buy Now... Pain Later?* (April 2021), available at [https://www.citizensadvice.org.uk/Global/CitizensAdvice/Debt%20and%20Money%20Publications/BNPL%20report%20\(FINAL\).pdf](https://www.citizensadvice.org.uk/Global/CitizensAdvice/Debt%20and%20Money%20Publications/BNPL%20report%20(FINAL).pdf)

Refinery29, *Paying For It: How Worried Should We Be About The Rise Of Buy Now, Pay Later?* (February 21, 2022), available at <https://www.refinery29.com/en-gb/2022/02/10862682/rise-of-buy-now-pay-later-uk>

of their relationship with the BNPL lender and the end retailer, one study specifically found that 32 percent of respondents had to “delay or skip paying an essential bill due to the payments on [their] Buy Now Pay Later plans.”<sup>170</sup>

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StudentBeans, *Trend 1: Buy now, Pay later* (2022), available at <https://partner.studentbeans.com/insights/future-of-commerce/trend-1>

These surveys have limitations. First, the ambiguous language used to define BNPL in many of these surveys means that the CFPB cannot confirm that all respondents in each of the surveys were referring to “pay-in-four” products and not longer-term Point of Sale loans. Second, the surveys generally do not ask respondents to compare their experiences with BNPL to other unsecured consumer credit products, which reduces that ability to perform cross-product comparisons. Third, the surveys have different methodologies and are not all necessarily representative of the BNPL borrower base described in this report.

<sup>170</sup> DebtHammer, Survey: Buy Now Pay Later Plans Fuel Debt Struggles

# 6. Takeaways and Risks

## 6.1 Takeaways

The previous sections have detailed the BNPL ecosystem from the perspective of the consumer—as an applicant, then as an active borrower (Section 3)—and the lender (Section 4), while Section 5 explored the impacts of BNPL usage on borrowers’ financial health. Below are some of the key takeaways from those sections:

- **The product is in a period of rapid growth.** BNPL loan and dollar originations of the five lenders surveyed in the CFPB’s December 2021 market monitoring orders have grown at over 200 percent per year. There were significantly more loan originations in Q4 ’21 (63.1 million) than in the seven *combined* quarters from Q1 ’19 through Q3 ’20 (53.2 million).
- **Consumers increasingly use BNPL for a diverse range of products, including “essential” purchases.** Apparel and Beauty’s combined share of dollar originations dropped from 80.1 percent in 2019 to 58.6 percent in 2021. Meanwhile, less discretionary industries such as Education (1,028 percent annualized growth rate in dollar originations from 2019 to 2021), Groceries (731 percent), Insurance (1,154 percent), and Utilities (885 percent) have been growing rapidly, though they still make up a small absolute share of the market (the four sub-verticals mentioned above combined to account for 1.3 percent of overall dollar originations in 2021).
- **The borrower base skews young, but more toward Millennials than Gen Z.** Of the five lenders surveyed, 18–24-year-olds (commonly referred to as “Gen Z”) made up 16.8 percent of the BNPL borrower base in 2021, a 44 percent over-index from their 11.7 percent share of the overall US 18+ population. Perhaps surprisingly to those who view the product as hyper-focused on Gen Z, that was only the third most over-indexed age cohort (25–33-year-olds—*i.e.*, younger Millennials—were 102 percent over-indexed, and 34–40 year-olds—*i.e.*, older Millennials—were 61 percent over-indexed). The 18–24-year-old cohort’s share of the BNPL borrower base has decreased over time, from 21.4 percent in 2019 to 18.8 percent in 2020 to 16.8 percent in 2021. Younger borrowers were also more likely to have a loan in derogatory (*i.e.*, default or collections) status, mirroring age-based delinquency statistics for legacy credit card borrowers.
- **User experience gaps exist for important account management features.** Some BNPL lenders’ policies make it difficult for borrowers to directly initiate a product

return or dispute, instead requiring borrowers to first contact the merchant. Lenders also often require autopay enrollment as a condition for taking out a BNPL loan, and some make removing autopay difficult or even impossible.

- **There are divergent company approaches on late fees and consumer fees as a whole.** In aggregate across the five lenders surveyed, the share of borrowers charged at least one late fee increased from 7.9 percent in 2020 to 10.5 percent 2021, but significant variations emerged between the lenders. In 2021, that metric for each of the five lenders was 0 percent, 5.8 percent, 9.5 percent, 13.6 percent, and 29.7 percent. That divergence continues when observing the share of 2021 company revenues derived from consumers (late fees and other fees): 0 percent, 2.1 percent, 7.2 percent, 7.8 percent, and 52.8 percent.
- **Unit margins are under stress from multiple sources.** Lenders are experiencing pressure on their unit margins (*i.e.*, unit revenues net unit expenses) on both sides of the equation: declining merchant discount fees, along with rising credit losses and funding costs. Different lenders are responding to these pressures with a combination of the following actions: tightening underwriting standards, increasing consumer fee revenues, and/or shifting toward acquiring borrowers via their proprietary apps rather than on the websites of retail partners.
- **Proprietary apps broaden and deepen the BNPL lender-borrower relationship.** By driving more traffic through their proprietary apps, lenders are able to own and control virtually every aspect of the borrower relationship, leading to higher repeat usage. This app-driven repeat usage—often aided by harvested consumer data and behavioral-science-guided “dark patterns”—may exacerbate the risks of overextension.

## 6.2 Risks to Consumers and Other Market Participants

The market study conducted by the CFPB identified a number of risks associated with BNPL products.

### 6.2.1 Discrete Consumer Harms

The CFPB's analysis of typical BNPL product features demonstrates that some market participants' offerings appear to be structured to evade certain federal consumer lending requirements. These requirements are designed to protect consumers and create a level playing field that fosters competition and consumer choice. Conversely, the absence of these requirements may lead to a competitive imbalance both within the BNPL industry and against similar products, as well as cause harm to consumers.

Discrete consumer harms in the context of BNPL loans may be occurring in the contexts discussed below.

#### Lack of standardized disclosures

For both open-end and closed-end credit, disclosures provide a standardized, meaningful visual aid about the terms of credit and allow consumers to make informed decisions across a variety of credit products. However, most BNPL lenders do not currently provide the standard cost-of-credit disclosures required by Regulation Z or periodic statements, though at least one lender currently does.

Transparency is a bedrock principle in U.S. credit regulation. The Truth in Lending Act (TILA) generally requires that lenders subject to its provisions provide disclosures that give a prospective borrower information on the costs and terms of a particular loan or credit product.<sup>171</sup> TILA, as implemented by Regulation Z, requires that lenders subject to its provisions provide consumers with a uniform set of clear and conspicuous cost-of-credit disclosures before consumers agree to take out a loan.<sup>172</sup> Key information included in these disclosures include, but is not limited to, the amount financed, total number of payments, finance charge and annual

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<sup>171</sup> The purpose of TILA is "to assure a meaningful disclosure of credit terms so that the consumer will be able to compare more readily the various credit terms available to him and avoid the uninformed use of credit, and to protect the consumer against inaccurate and unfair credit billing and credit card practices." 15 U.S.C. § 1601(a).

<sup>172</sup> See Reg. Z, 12 C.F.R. 1026.17.

percentage rate, and potential late fee disclosures.<sup>173</sup> Regulation Z provides additional disclosure and other requirements that are specific to open-end credit, particularly to credit cards. These include as applicable requiring that account-opening disclosures disclose penalty rates, minimum interest charges, transaction charges, and grace periods, requiring periodic statements, and providing special credit card provisions such as consideration of the consumer's ability to pay.<sup>174</sup>

The lack of clear, standardized disclosure language may obscure the true nature of the product as credit and make important information about loan terms, including when and how fees are assessed, and when payments are due, less accessible.

## Dispute resolution challenges

Dispute resolution is the top-ranking BNPL-related complaint category in the CFPB's Consumer Complaint Database. The lack of uniform billing dispute rights leads to operational hurdles (requirements that consumers first, or exclusively, contact the merchant for dispute resolution) and financial harm (as consumers are required to pay remaining installments by continued withdrawal of funds from the consumer's debit card while resolution of the return or dispute is pending). These hurdles and harms may be accentuated with the shift to the app-driven acquisition model, as the virtual cards used to facilitate most of those transactions can add an additional level of complexity and friction in processing refunds.

Regulation Z requires creditors of open-end credit and credit card issuers (regardless of whether the credit card is accessing open-end or closed-end credit) to provide billing dispute and error resolution rights, which provide consumers with the right to withhold payment while a billing dispute is being resolved.<sup>175</sup> Most BNPL lenders surveyed are currently not following Regulation Z's credit dispute resolution provisions and consumers sometimes are required to pay loan installment amounts in dispute pending dispute resolution.

## Compulsory use of autopay

Federal law on credit products is mindful that consumers should have choice when they decide if and how to make payments on outstanding debts. For example, the Electronic Funds Transfer Act, as implemented by Regulation E, prohibits a creditor from requiring a consumer to repay a loan through an automatic withdrawal from their deposit account, also known as autopay.<sup>176</sup>

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<sup>173</sup> See Reg. Z, 12 C.F.R 1026.18.

<sup>174</sup> See Reg Z, 12 C.F.R. 1026.5-1026.16; 1026.51-1026.61.

<sup>175</sup> 12 C.F.R. 1026.12-1026.13.

<sup>176</sup> See 12 CFR 1005.10(e) and related commentary.

Most BNPL lenders require that borrowers use autopay and, in addition to debit cards, allow repayments by credit cards (which do not directly debit a consumer’s deposit account). In addition, some BNPL lenders make removing autopay challenging or impossible. Autopay increases the “stickiness,” or likelihood of repayment, of the payment method provided at checkout, thereby reducing collections costs and credit losses. However, a policy of requiring autopay may adversely limit consumer choice and flexibility to elect or change payment methods, or to skip a BNPL payment to satisfy other financial obligations.

## Multiple payment re-presentments

All five BNPL lenders re-present (*i.e.*, attempt to reauthorize) failed payments, in some instances up to eight times for a single installment.<sup>177</sup> Consumers may experience harm from multiple attempted presentments in the form of fees charged by the consumer’s bank associated with the payment method,<sup>178</sup> along with the downstream impacts to consumers when those funds are unavailable to pay other obligations. These harms can be exacerbated in the “forced autopay” situation described above, as lenders have a payment method on file to use for automated re-presentments.

## Late fees

At least one BNPL lender’s policy permitted it to impose multiple late fees on the same missed payment.<sup>179</sup> As industry-specific and broader macroeconomic factors continue to put pressure on BNPL unit margins (see Section 4), lenders might impose more aggressive late fee strategies.

Regulation Z prohibits credit card issuers from assessing multiple late fees for the same missed payment.<sup>180</sup> In addition, the Credit Card Accountability Responsibility and Disclosure Act of

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<sup>177</sup> As referenced in Section 3, a re-presentation is an attempt to collect an outstanding missed payment by processing a consumer’s payment method one or more additional times.

<sup>178</sup> Most BNPL products meet the definition of “covered loans” under the CFPB’s Payday, Vehicle Title, and Certain High-Cost Installment Loans Rule (currently stayed in litigation) and are subject to its disclosure provisions and limitations on consecutive failed payment attempts. “Covered loan” includes loans where “the consumer is required to repay substantially the entire amount of the loan with 45 days of consummation or of the advance. 12 C.F.R. 1041.3(b). See also <https://www.consumerfinance.gov/rules-policy/final-rules/payday-vehicle-title-and-certain-high-cost-installment-loans>; <https://www.consumerfinance.gov/rules-policy/final-rules/payday-vehicle-title-and-certain-high-cost-installment-loans-revocation-rule>. In addition, the FDIC recently issued supervisory guidance about the compliance risks to banks that charge multiple re-presentation NSF fees on the same unpaid transaction. See Federal Deposit Insurance Corporation, Supervisory Guidance on Multiple Re-Presentment NSF Fees (August 18, 2022) available at <https://www.fdic.gov/news/financial-institution-letters/2022/fil2040.html>.

<sup>179</sup> It appears those practices have changed at the time of report publication.

<sup>180</sup> See, Reg Z 1026.52(b)(2)(ii). The prohibition also applies to card issuers’ agents with respect to the card.

2009 (CARD Act) requires late fees on an open-end credit card account to be “reasonable and proportional.”<sup>181</sup>

## 6.2.2 Data Harvesting

The practice of harvesting and monetizing consumer data across the payments and lending ecosystems may threaten consumers’ privacy, security, and autonomy. It also may lead to a consolidation of market power in the hands of a few large tech platforms who own the largest volume of consumer data, reduce long-term innovation, choice, and price competition. Additionally, there is the risk that harvested data could be used to offer targeted discounts to some customers but not others, which could mean that different groups of consumers are paying different prices for the same goods at the same retailer.

The BNPL industry provides an example of the data harvesting that is occurring at the intersections of digital commerce, content, and lending.<sup>182</sup> BNPL lenders often collect a consumer’s data—and deploy models, product features, and marketing campaigns based on that data—to increase the likelihood of incremental sales and maximize the lifetime value they can extract from the consumer. The use cases of that data broadly fall into two categories:

- Individual consumer demographic, psychographic, and behavioral data, leveraged to optimize the specific products and brands promoted to that consumer.<sup>183</sup>
- Aggregated data that modifies the general product experience (font, color scheme, word choice, user flow order, etc.) to drive consumer behavior in subtle ways toward a desired outcome.

Both use cases confer financial benefits to BNPL lenders, primarily in the form of incremental Merchant Discount Fee revenue in the merchant partner acquisition model, and increased affiliate fee and interchange revenue in the app-driven model.<sup>184</sup>

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<sup>181</sup> See, 15 U.S.C. 1665d(a)

<sup>182</sup> Consumer Financial Protection Bureau, *The Convergence of Payments and Commerce: Implications for Consumers* (August 4, 2022), available at <https://www.consumerfinance.gov/data-research/research-reports/the-convergence-of-payments-and-commerce-implications-for-consumers>

<sup>183</sup> General examples of demographic data (not necessarily used by BNPL lenders) include age, race, gender, country/state of residence, and socioeconomic status. General examples of psychographic data include personality traits, interests, and lifestyle choices. General examples of behavioral data include purchase history, time spent on a given web page, and levels of “engagement” with various types of a company’s product and marketing features.

<sup>184</sup> None of the five lenders surveyed directly sells data to third parties. However, the fact that BNPL lenders usually restrict their data usage to “first party” scenarios does not eliminate potential consumer risks.

The availability and effectiveness of both use cases may increase as lenders' customer acquisition models shift from merchant partnerships to BNPL-branded apps. As detailed in Section 4, the app-driven model provides lenders with a significant advantage of proprietary virtual real estate. Additionally, the value of that proprietary real estate (*i.e.*, "first-party" data usage) to advertisers may increase as mobile operating system providers reduce tech platforms and retailers' ability to track customer usage across apps and websites (*i.e.*, "third-party" data usage).<sup>185</sup>

In addition to these general data harvesting risks, BNPL lenders' use of consumer data for revenue-generating purposes has the potential to increase overextension risks by engendering repeat usage and contribute to market concentration by rewarding a small number of firms who achieve the largest quantity of consumer data.

### 6.2.3 Overextension

In addition to the discrete consumer harms outlined above, BNPL product structures and business strategies may contribute to a third category of risk: overextension, which can manifest itself in two distinct ways.

The first type of overextension risk is loan stacking, which can occur when a borrower takes out two or more concurrent BNPL loans from different lenders. While each individual loan may be manageable, the sum of those concurrent debts may lead to financial stress. The product's ease of use and high approval rates, combined with "dark pattern"-driven user interfaces that entice incremental usage, may amplify this risk.

The second type of overextension risk is sustained usage, which can occur over a longer time horizon and results from habitual BNPL usage leading to delinquency or default on other, potentially less discretionary, debts and financial obligations. The appealing nature of the BNPL product (no interest charges, easy-to-use, and ubiquitous), coupled with product features such as forced autopay and harvested individual user data could contribute to patterns of sustained usage.

Although the BNPL industry has strong financial incentives to maintain low credit losses (due to the thin unit margins discussed in Section 4), these overextension risks are difficult for any individual lender to manage. Addressing loan stacking requires near-real-time data on an applicant's BNPL usage with competitors. Unless BNPL competitors disclose that information to

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<sup>185</sup> Apple Rolls Out Major New Privacy Protections For iPhones And iPads; Introducing the Privacy Sandbox on Android

a real-time database or consumer reporting companies, lenders cannot use it to supplement their underwriting tools.

Sustained usage is difficult to measure and address because its effects are primarily seen on consumers' personal budgets and on non-BNPL lenders' balance sheets. Additionally, as long as borrowers continue to repay their BNPL debts, a BNPL lender has no direct incentive to act on sustained usage concerns.

In general, BNPL lenders do not currently furnish repayment histories to the consumer reporting companies, which may compound overextension risks by masking borrowers' BNPL usage and loan performance from other lenders. In a June 2022 blog post,<sup>186</sup> the CFPB cited concerns about a lack of consistent BNPL furnishing standards between the NCRCs.

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<sup>186</sup> Consumer Financial Protection Bureau, *Buy Now, Pay Later and Credit Reporting* (June 15, 2022), available at <https://www.consumerfinance.gov/about-us/blog/by-now-pay-later-and-credit-reporting/>

# 7. Appendix

## 7.1 Merchant vertical, subvertical mapping

The CFPB' mapped merchant subverticals and verticals based on the original inputs from the five BNPL lenders surveyed.

Original Lender Input	CFPB Tagged Subvertical	CFPB Tagged Vertical
Accessories	Apparel	Apparel
Adult	Games/Hobbies	Personal Effects
Alcohol	Food/Drink (non-grocery)	Everyday
Apparel	Apparel	Apparel
Appliances	Home Improvement	Home
Art (non-collectible)	Games/Hobbies	Personal Effects
Arts & Crafts	Games/Hobbies	Personal Effects
Arts-n-craft	Games/Hobbies	Personal Effects
Audio	Electronics	Personal Effects
Auto costs, non-hardware (gas, tolls, etc.)	Auto - Transportation	Everyday
Auto Repair and/or Tires	Auto - Parts/Tires	Automotive
Automotive (non services, no vehicles)	Auto - Parts/Tires	Automotive
Auto-parts	Auto - Parts/Tires	Automotive
Baby & Kids	Apparel	Apparel
Beauty	Beauty	Beauty
Books	Games/Hobbies	Personal Effects
Cameras	Electronics	Personal Effects
Cellphones	Electronics	Personal Effects
Clothing / Accessories	Apparel	Apparel
Computer	Electronics	Personal Effects
Computer-hardware	Electronics	Personal Effects
Confectionary	Food/Drink (non-grocery)	Everyday
Consulting	Services	Services
Cosmetics	Beauty	Beauty
Deals	Other	Other
Department Stores	Mass Market	Mass Market
Discount store / wholesale / platform	Mass Market	Mass Market
Domestic Appliances	Home Improvement	Home
Education	Education	Services
Elective Medical Procedures	Elective Medical	Health

Electronics	Electronics	Personal Effects
Entertainment (Concerts, sporting events, theater)	Travel/Entertainment	Travel/Entertainment
Experiences	Travel/Entertainment	Travel/Entertainment
Eyewear	Health Products	Health
Fashion	Apparel	Apparel
Finance	Services	Services
Fitness	Fitness/Sporting Equipment	Personal Effects
Fitness/Sporting Equipment	Fitness/Sporting Equipment	Personal Effects
Flowers	Home Improvement	Home
Food - Perishable (including grocery and supermarkets)	Groceries	Everyday
Food - Quick Service/Fast Food	Food/Drink (non-grocery)	Everyday
Food & Beverage (no alcohol, non-perishable)	Groceries	Everyday
Food Delivery	Groceries	Everyday
Food Meal Kits	Groceries	Everyday
Food-n-drink	Groceries	Everyday
Footwear	Apparel	Apparel
Furniture	Furniture/Home Furnishings	Home
Furniture/Home Furnishings	Furniture/Home Furnishings	Home
Games/Hobbies	Games/Hobbies	Personal Effects
General Goods	Mass Market	Mass Market
General Merchandise	Mass Market	Mass Market
General Utilities	Utilities	Everyday
Groceries	Groceries	Everyday
Hardware	Electronics	Personal Effects
Health	Health Products	Health
Holistic Therapies and Wellness	Health Products	Health
Home	Furniture/Home Furnishings	Home
Home & Garden (non-furniture)	Home Improvement	Home
Home Appliance	Home Improvement	Home
Home Improvement	Home Improvement	Home
Home Improvement & Home Appliance	Home Improvement	Home
Houseware	Home Improvement	Home
Insurance	Insurance	Services
Insurance <sup>1</sup>	Insurance	Services
Jewelry	Jewelry	Personal Effects
Jewelry/Watches	Jewelry	Personal Effects
Legal Fees	Services	Services
Medical, dental, health care	Elective Medical	Health
Misc.	Other	Other
Mobile, Cable, or Internet	Utilities	Everyday

Musical Instruments & Accessories	Games/Hobbies	Personal Effects
Music-instruments	Games/Hobbies	Personal Effects
Music-videos	Games/Hobbies	Personal Effects
Non-profit	Services	Services
Office	Home Improvement	Home
Other	Other	Other
Other (Not Categorized)	Other	Other
Other categories	Other	Other
Other/Unknown	Other	Other
Outdoor	Home Improvement	Home
Pet Care	Pet Care	Services
Pets	Pet Care	Services
Pet-supplies	Pet Care	Services
Pharmaceuticals	Health Products	Health
Philanthropy	Services	Services
Photography	Games/Hobbies	Personal Effects
Professional Services	Services	Services
Retail	Mass Market	Mass Market
Services	Services	Services
Skincare	Beauty	Beauty
Software	Electronics	Personal Effects
Sporting & Outdoor Goods	Fitness/Sporting Equipment	Personal Effects
Sports	Fitness/Sporting Equipment	Personal Effects
Sports-equip	Fitness/Sporting Equipment	Personal Effects
Streetwear	Apparel	Apparel
Subscription Fees	Subscription Fees	Services
Toys	Games/Hobbies	Personal Effects
Transportation Costs & Expenses	Auto - Transportation	Everyday
Travel	Travel/Entertainment	Travel/Entertainment
Tuition, fees, and any related expenses for technical, training, or educational certificates, degrees, or courses	Education	Services
Tuition, fees, and any related expenses for technical, training, or educational certificates, degrees, or courses	Education	Services
Uncategorized non-partner merchant	Other	Other
Vacation	Travel/Entertainment	Travel/Entertainment
Variety	Other	Other
Vitamins/Supplements	Health Products	Health
Weapons & Accessories	Games/Hobbies	Personal Effects
Website-services	Services	Services

## 7.2 Definitions of unit economics line items

### Unit Revenues

- *Merchant-Derived*
  - **Merchant Discount Fees:** Per-transaction fees charged to merchants with whom the BNPL lender has a direct contractual relationship (and, usually, a technical integration on the merchant's website, app, and/or store devices). They are charged on BNPL loans that originated on a merchant partner's website (*i.e.*, via the merchant partner acquisition model), though they may also be charged on BNPL loans that originated on the lender's app or website (*i.e.*, the app-driven acquisition model) from merchants who also have a direct contractual relationship with that lender.
  - **Interchange Fees:** The lender's share of standard card interchange fees charged to the merchant to process a loan that occurs on a BNPL lender-issued virtual debit or credit card.<sup>187</sup> They are charged on all loans processed via these virtual cards, the majority of which occur in the app-driven acquisition model.
  - **Referral/Affiliate Fees:** Fees paid by merchants for purchases that originated from a sponsored posting on the BNPL lender's app or website. Also referred to as "lead generation" fees, these are analogous in structure to the fees that retailers pay for sales derived from ads or sponsored posts placed on social media or content publishers' platforms. These fees predominantly come via the app-driven acquisition model.
- *Consumer-Derived*
  - **Late Fees:** Fees collected from consumers by virtue of being late on a BNPL payment. The lenders surveyed on average collect about half of the late fees that are assessed. Only the fees that were in fact collected factor into this unit margin metric.
  - **Transaction Fees:** Fees collected from consumers for taking out a BNPL loan. This fee is assessed by one of the five lenders surveyed and is specifically collected from customers who take out a loan from a non-partnered merchant via a lender-issued virtual card.

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<sup>187</sup> The lender receives a large share of the interchange fees charged for the virtual card transactions that it issues but must split some of these fees with the issuer processor that facilitates the transaction along with the payment network and the issuing bank with which the lender partners.

## Unit Expenses

- **Underwriting:** The expenses incurred to underwrite and render a decision on each applicant for credit, fraud, and compliance-related purposes.<sup>188</sup> These expenses are usually borne as per-application “calls” to the API of a third-party vendor, such as (but not limited to): credit bureaus, “open banking” aggregators,<sup>189</sup> general and specialty fraud vendors, and compliance data brokers.
- **Cost of Funds** (also referred to as cost of sales or cost of capital): The interest charges paid by a lender to acquire the funds necessary to lend to consumers. While some BNPL lenders are able to access the cheapest form of funding—consumer deposits—from banking products for a portion of their liquidity needs, most rely on a combination of bank or hedge fund-underwritten debt facilities and open-market securitizations. As discussed, worsening macroeconomic conditions that have led to an increase in interest rates have put upwards pressure on this expense item.
- **Payment Processing and Servicing:** The expenses incurred to take and process BNPL loan repayments. This includes both the standard interchange fees required to process the consumer’s debit or credit card payments as well as the costs to service the payments.
- **Credit Loss Provisions** (also commonly referred to as charge offs): The amount of money set aside for projected credit losses from the outstanding portfolio. Credit losses are defined as loan balances that remain unpaid after a significant period of time and are thus deemed to have a very low probability of being collected. Industry-standardized, generally accepted accounting principles are typically used to determine when an unpaid debt is categorized as a charge-off (*i.e.*, uncollectible). Of the five lenders surveyed, one charges BNPL loans off at 84 days past due, one at 90, two at 120, and one at 180.

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<sup>188</sup> These can include, but are not limited to, verifying an applicant’s age and running an applicant’s information against anti-money laundering (AML) and Office of Foreign Assets Control (OFAC) lists.

<sup>189</sup> Open banking is defined here as any platform that allow consumers to directly link their bank information for online payments or applications for credit.