



The economic impact of Afterpay in the US



A report for Afterpay October 2023

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October 2023

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Table of contents

Executive summary	4
1. Introduction	8
2. Buy Now, Pay Later: a valuable tool for managing household finances	10
3. Generating value for American customers	14
4. Afterpay: A trusted and valued BNPL service	16
5. Supporting US businesses and the wider economy	17
6. Appendix: Modelling methodology	19

Executive summary

Household budgets in the US are under stress from the rising prices of everyday goods and services, higher borrowing costs, and the resumption of student loan payments. As Americans dip into their savings or resort to alternative budgeting options, signs of financial distress are showing,¹ with credit card delinquency rates at their highest since 2010, particularly among younger age groups.² Further, the latest World Bank survey data indicates that, in 2021, a third of American households, and a larger proportion of those in vulnerable younger and low-income categories, may not have access to credit from banks or other formal financial institutions, to help them with their household budgets.³

37%

of US customers surveyed used BNPL in the last 12 months

62%

of BNPL customers surveyed used it at least once a month

74%

or more of Gen Z and Millennial BNPL customers used it at least once a month

Inflation

has put a strain on household finances

Signs of stress are particularly evident among younger households, ethnic minorities and those from low-income households

BNPL: a growing service and a helpful tool to manage spending

In this context, the use of **Buy Now, Pay Later** (BNPL) services has grown as customers find it an **easy to use, convenient and a low-cost way** to make purchases and spread expenses over a longer period of time without incurring immediate financial strain.

The BNPL industry is poised for significant growth in the coming years. The value of BNPL transactions constituted an estimated 5.4% of total US e-commerce spending⁴ (around \$50 billion)⁵ in 2022. By 2027, BNPL payment value in the US is forecast grow more than 4-times faster than overall consumer spending in the US, to reach almost \$125 billion⁶ (around 7% of total e-commerce).^{7,8}

Oxford Economics was commissioned by Afterpay to analyze how BNPL services provide value for customers, help merchants boost their sales and achieve efficiencies, and consequently, support economic activity and jobs in the wider economy. Our report is based on findings from two bespoke surveys—of 1,390 BNPL customers and of 1,000 merchants who use Afterpay—supplemented by data provided by Afterpay and evidence from other third-party sources.

BNPL services have gained significant traction among US consumers, with Millennials and Gen X constituting a vast majority of all US BNPL users.⁹ According to Afterpay data, Millennials constitute the largest customer group of BNPL services in the US. That being said, research found that **younger generational cohorts tend to use BNPL services more frequently,** with 75% of Gen Z and 74% of Millennial BNPL customers reporting using the service at least once a month, compared to only 52% of Gen X customers.

One-in-five BNPL customers [20%] in our survey say it is their preferred method of payment ahead of cash, credit or debit cards. Close to half of BNPL customers surveyed indicated that they preferred it over credit cards for their purchases.

We find that **BNPL customers would like to see it being offered more widely, and that they understand the financial implications of using the service.** More than two-thirds [69%] of customers indicated that they would use BNPL more if it were more widely available, with the demand for BNPL services being higher among Gen Z customers and Millennials [79%]. A 2022 survey by the Financial Health Network found that a majority of BNPL customers did not have issues with the payments, terms, or fees associated with BNPL services. Only 8% of BNPL customers surveyed found it challenging to make payments or missed one, while just 1% had difficulty understanding the terms and conditions of the service.¹⁰

Nearly half

prefer BNPL over credit cards for their purchases, according to our survey

69%

indicated they would spend more with BNPL if it were more widely available

\$125 billion

Projected value of BNPL payments in 2027, implying an annual growth rate forecast of 18% per year

BNPL attributes valued by customers

BNPL customers value the service for a range of reasons, with cost of access, convenience of usage, and stress-related attributes dominating. A majority of the BNPL customers surveyed believe that it helps avoid paying high-interest credit card debt (70%). If repayments are missed, a \$500 purchase made using a credit card would accrue almost 4-times more in interest in 12 months compared to the cost of missing BNPL payments for the same purchase.¹¹ Respondents also indicated that BNPL is cheaper than other forms of finance (69%); and provides access to credit that other services [e.g., credit cards] do not (63%). The above beliefs are held by a similar proportion of survey respondents less than 24 years of age and those from low-income households, implying that these groups value the fact that BNPL services provide low-cost access to funds during purchases which may not be available elsewhere.

BNPL customers also valued the flexibility it provides to manage their household budgets. A majority (60%) of the BNPL customers surveyed agreed that BNPL helps them manage their finances, with a similar proportion (61%) indicating that it helped them manage the impact of inflation. A majority of BNPL customers surveyed (55%) also indicated that the service helped them save more.

BNPL services play a key role in reducing stress related to financial reasons. Inflation-related financial concerns are the leading cause of stress among Americans, with nearly nine out of 10 Americans anxious about the rise in prices of everyday goods.¹² Survey respondents highlighted BNPL's role in managing financial burdens, especially during the holiday season, with an impressive 71% finding it effective in alleviating the stress of large expenses and 67% indicating that BNPL helps ease the strain of holiday spending.

Fig 1. Attributes valued by BNPL customers. % of BNPL customers who use the service for the following reasons. Source: YouGov, Oxford Economics



\$4.2 billion

consumer surplus from BNPL services in the last 12 months

Value to consumers from BNPL services

Using statistical techniques based on survey responses, we estimate that BNPL generated an \$4.2 billion in value, as measured by 'consumer surplus',¹³ to customers. The median value associated by BNPL customers was estimated to be \$44 per customer per year. **Younger generations, minority groups and students value BNPL services more, broadly in line with their usage.**

Afterpay: a valued and trusted brand

Afterpay is one of the leading providers of BNPL services in the US, providing payment options and connecting shoppers to merchants since 2018. **Afterpay customers also valued BNPL services more, over three times higher compared to others in the survey.** The low cost and convenience of BNPL services over credit cards is especially favored by Afterpay customers. A greater proportion of Afterpay customers also found it more convenient for financial management than others.

Afterpay stimulated \$8.6 billion in retail sales

BNPL providers, and Afterpay in particular, have become key partners for their merchants, especially SMBs, in helping them meet customer demands for improved online and digital checkout experiences when shopping. Compared to the US business landscape, Afterpay partners with a larger share of businesses that are women-owned (73% Afterpay vs 21% US) and owned by minorities (40% Afterpay vs 20% US). Afterpay's BNPL services provide significant advantages for partner-merchants in various ways.

Retailers surveyed for this study indicated that Afterpay helped with increasing customer engagement, exposure to new customers, repeat purchasing, and customer basket sizes.

These increases were driven by a variety of factors: approximately 80% of merchants reported that the increased sales was because they could attract and retain more customers through better brand awareness, promotions, and referrals from the shop directory contributed to sales growth. The impact of these effects on sales was significant. Merchants indicated that they would have experienced revenue losses if they couldn't offer Afterpay to their customers, even when considering potential sales that might have been recovered through other payment methods. Put differently, Afterpay helped merchants generate an incremental \$8.6 billion in sales in the 12 months to August 2023.

Net benefits to merchants estimated to be \$5.6 billion

At a time when US retailers are facing the twin challenges of evolving customer preferences and rising costs, retailers offering Afterpay are able to provide their customers a convenient, low-cost option to spread payments for purchases, while also helping them generate efficiencies and reduce costs. The overall net benefit

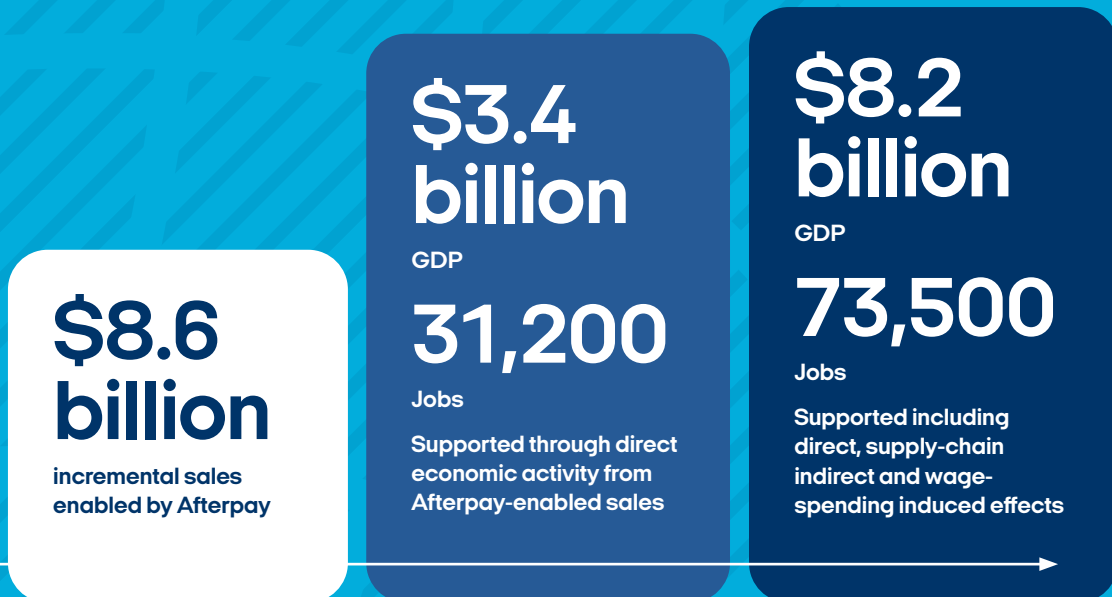
reported by retailers in our survey is noteworthy, amounting to \$5.6 billion in the 12 months to August 2023, after accounting for other costs associated with the incremental sales. The positive impact was not limited to large businesses only. Small and medium-sized enterprises (SMBs) as well as businesses owned

by women or young entrepreneurs also reported experiencing similar proportionate uplifts in their revenues, indicating that BNPL services are beneficial across various businesses of all sizes and ownership demographics.

Economic activity and jobs supported by Afterpay

The incremental sales enabled by Afterpay contributes to economic activity and supports jobs across the wider US economy. The incremental sales mean that retailers will have to place larger orders with their suppliers and hire additional staff to meet the increased demand. Increased spending with suppliers as well as by employees, in turn, is associated with further rounds of economic activity in the wider economy. We refer to the economic effects supported through the incremental sales as 'direct' effects, through the supply-chain as 'indirect' effects, and through employee-spending as 'induced' effects.

We estimate the direct GDP contribution associated with Afterpay-stimulated sales to be \$3.4 billion in the 12 months to August 2023. The total contribution, including contributions through indirect supply-chain-linked and through wage-spending induced channels, to be \$8.2 billion during the same period. Afterpay-enabled sales also support 73,500 jobs in the US economy in total through direct, indirect and induced channels. The total employment supported, of 73,500 jobs, represents about 2.6% of the annual growth in jobs in the 12 months ending Q2 2023 in the US as a whole.



1. Introduction

Household budgets in the US are under pressure from high inflation, rising energy prices, the resumption of student loan payments, higher borrowing costs and lending standards, and a drawdown in savings. Sharp increases in the price of essentials and daily expenses have strained household finances. In a Gallup survey, around 3 out of 5 [61%] of Americans indicated in April 2023 that price increases have caused financial hardship for their households, with 15% indicating that the impact of inflation is severe and has affected their ability to maintain their standard of living.¹⁴

What is Buy Now, Pay Later (BNPL)?

In this context, households have valued the use of financial services and payment options—such as Buy Now, Pay Later (BNPL)—to help manage their spending and budgets. BNPL services generally are a source of interest-free funds that allows a consumer to purchase a product from a retailer, and then pay the BNPL service provider for the expenditure over multiple installments, with the first installment typically being a down payment on the purchase. BNPL purchases typically range from \$50 to \$1,000 and are subject to late fees if a borrower misses a payment.¹⁵

Purpose of this report

Afterpay commissioned Oxford Economics to analyze the role of BNPL in managing household finances and supporting merchants, and the wider economy. The findings in this report are based on a survey of 1,390 US customers of BNPL services, and a survey of 1,000 merchants using Afterpay to support their sales, supplemented by data from Afterpay and other third-party sources.

Structure of this report

The rest of this report is structured as follows:

Section 2 discusses the evidence from our BNPL customer survey on the role of BNPL services in helping US consumers manage the impact of inflation on their finances;

Section 3 presents our estimates of the value generated by BNPL services based on findings from the customer survey and bespoke econometric modeling;

Section 4 explores the role of Afterpay in helping US businesses in their operations based on findings from our merchant survey; and

Section 5 reports findings from our economic modeling on wider economic activity supported through sales stimulated by Afterpay.

A detailed description of our methodology is included as an Appendix to this report.



Expedia flies higher with Afterpay

A new partnership with Afterpay has seen the global travel brand grow its footprint.

For more than two decades, Expedia has helped unlock global travel – making it simpler for customers to take dream vacations, enjoy new experiences and visit new places.

As one of the original online travel companies, Expedia has driven the democratization of travel by enabling customers to manage their own trips and travel plans.

So, partnering with Afterpay – which allows customers to manage their travel payments – was a natural fit.

Expedia began offering Afterpay last year, and, since then, customers have been able to book travel and spread their payments over four installments. The partnership has been successful from the outset, says Julia Merritt, Expedia Group's director of global business development, strategic partnership and affiliates.

"We recognize that travel is not only an incredibly deliberate purchase but that it carries quite a high ticket value. So, being able to ensure that our customers can take that trip or go to that place and see that destination, and make sure it's the best financial purchase for them, is really important for us."

Not only has the partnership made travel more accessible for customers, but it has delivered business benefits for Expedia.

"We are very excited to have had the success we have had with Afterpay in the first 10 months. We have been able to tap into a highly engaged audience with a very high purchase intent."

"Afterpay helps us get in front of a customer base that may not have thought to book with Expedia previously," she adds. "Afterpay has been a phenomenal strategic partner of ours and we are very excited to continue with that growth."

"Afterpay has been a phenomenal strategic partner of ours and we are very excited to continue with that growth."

Merritt says Expedia decided to partner with Afterpay after noticing the "huge surge in popularity of Buy Now Pay Later in the US".

"Afterpay has a really great customer-facing product... and it's really important for us to be able to provide our consumers with the products that they are already interacting with."

2. Buy Now, Pay Later: A valuable tool for managing household finances

US inflation peaked at over 9% in June 2022, a 40-year high. In response, the US Federal Reserve raised interest rates from near zero to their highest level in over 20 years in an attempt to cool the economy and tame inflation. Higher borrowing costs have further weighed on US households' finances, particularly those with higher levels of debt. In response to rising prices, Americans have collectively drawn down on their savings and taken on more debt, including via credit cards.^{16,17}

The collective increase in borrowing can be considered an economically rational and practical response to this temporary economic shock. Concerningly, however, **signs of an increase in financial distress have also emerged evidenced by an increase in delinquency rates.** Indeed, these rates have reached their highest point since 2010, particularly among younger age groups and low-income households.,

In the rest of this section, we describe how BNPL services have provided customers a **low-cost option** to spread payments, enabling them to **manage their household budgets better and helping avoid financial stress.**

A fast-growing service helping manage household finances

BNPL has been a helpful tool for households to manage the impact of inflation on their household finances.

By allowing consumers to spread out payments over time without having to take on high-interest debt, BNPL services provide an option that enables households to make necessary purchases without incurring immediate financial strain.

BNPL transactions represent a small but growing share of total e-commerce, constituting an estimated 5.4% of total e-commerce spending (approx. \$50 billion) in 2022. In comparison, digital wallets, credit cards, and debit cards made up 32%, 30% and 20% of total e-commerce respectively. By 2027, BNPL payment value is forecast to reach almost \$125 billion (around 7% of total commerce), implying a forecast annual growth rate of close to 18% between 2022 and 2027.^{20,21,22}

Data from Afterpay reveals that in the US, there are nearly twice as many Millennial customers compared to Gen X customers and more than three times as many Gen Z customers. In other words, Millennials make

up 55% of a sample of Gen Z, Millennial and Gen X customers. whereas Gen X accounts for 31% of this particular sample of BNPL users and Gen Z accounts for 14% of this sample of BNPL users.

Since 2019, Buy Now, Pay Later (BNPL) services have evolved significantly. In 2019, beauty and apparel accounted for 80% of BNPL spending. BNPL services supported a significant proportion of all spending on fashion and beauty in the US; 18% of all fashion and clothing e-commerce sales in the US were made using BNPL services in 2021.^{23,24} A notable portion of customers expressed their willingness to increase their spending on vacations [24%], and on leisure activities [16%] like attending sports events and music concerts if BNPL services were readily accessible for such purchases.

Around 62% of BNPL customers indicated that they used the service at least once a month. **Younger generational cohorts tend to use BNPL services more frequently,** with 75% of Gen Z and 74% of Millennial BNPL customers reporting using the service at least once a month, compared to only 52% of Gen X customers.

Fig. 2. Credit card balance and inflation, Q1 2003 to Q2 2023. Source: NY Fed/Equifax, Oxford Economics

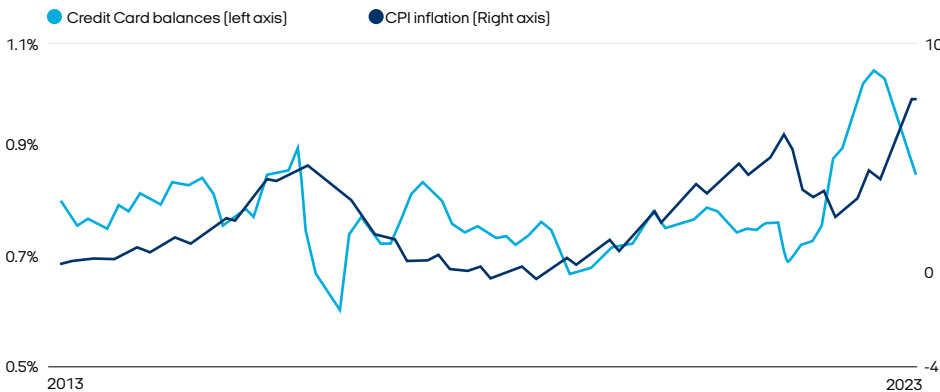


Fig 3. Frequency of BNPL use, for different sections of BNPL customers % of BNPL customers who use BNPL at least once a month. Source: YouGov, Oxford Economics

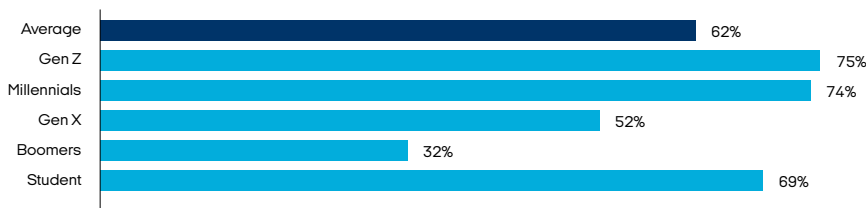
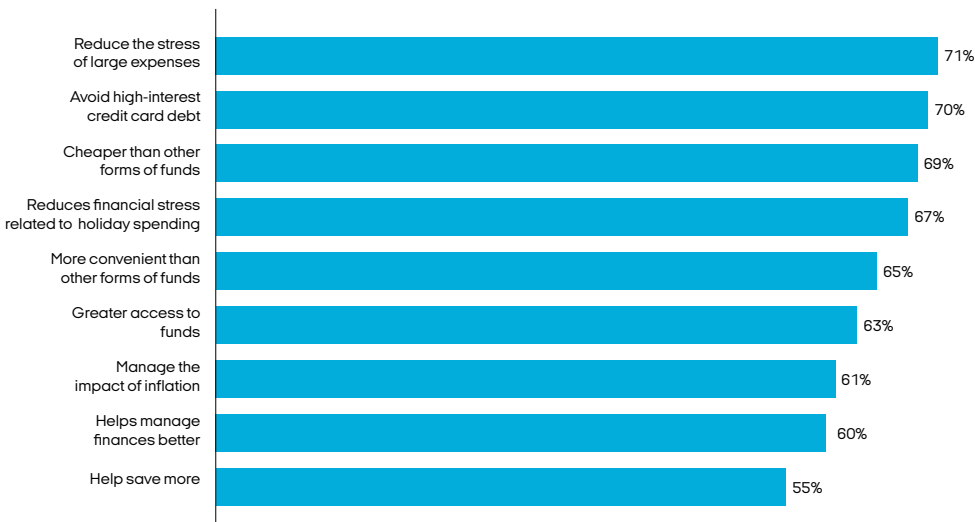


Fig 4. Low-cost and access benefits of BNPL services. % of BNPL customers who use the service for. Source: YouGov, Oxford Economics



Our survey reveals a growing trend in spending through BNPL services among customers, with nearly 85% of BNPL customers reporting that they either maintained or raised their spending through BNPL services in the previous 12 months. Notably, almost 45% of these respondents cited increased household expenses driven by rising inflation as the primary reason for their heightened usage during this period.

A low-cost option for spreading payments

A significant proportion of American adults are excluded from the formal financial system. Estimates from the Federal Reserve indicate that in 2022, one out of five Americans were unbanked or underbanked, i.e., they do not have full access to the range of savings and credit services provided by formal financial institutions.²⁵ World Bank survey data indicates that younger adults and those with a low income were more likely to suffer from a lack of access to funds on credit.²⁶

Households need access to funds, whether through credit or other financial services, to stretch out their payment schedules especially when dealing with rising expenses. In this context, BNPL has proven to be a valuable service for spreading expenses. A majority of the BNPL customers surveyed believe that BNPL helps avoid paying high-interest credit card debt [70%]; is cheaper than other forms of finance [69%]; and provides access to credit that other services (e.g., credit cards) do not [63%].

The above beliefs are held by a similar proportion of survey respondents less than 24 years of age and those from low-income households, implying that BNPL services provide low-cost access to funds at check out during purchases where formal financial institutions may not.

A tool to manage the impact of inflation

BNPL customers find that it provides them **greater flexibility to manage their household budgets**. A majority [60%] of the BNPL customers surveyed agreed that BNPL helps them manage their finances, with a similar proportion [61%] indicating that it helped them manage the impact of inflation in particular. A majority of BNPL customers surveyed [59%] also indicated that the service **helped them save more**.

BNPL services provide a low-cost alternative to manage large expenses in particular. Nearly one-in-five [19%] of those surveyed said they would use BNPL services, if available, to cover a sudden, unexpected bill of \$300, and would prefer it to borrowing from other sources [banks or other providers, or from friends and family]. This preference for BNPL services [19%] to address unexpected large expenses is nearly on par with those who favor credit cards [20%] for such circumstances.

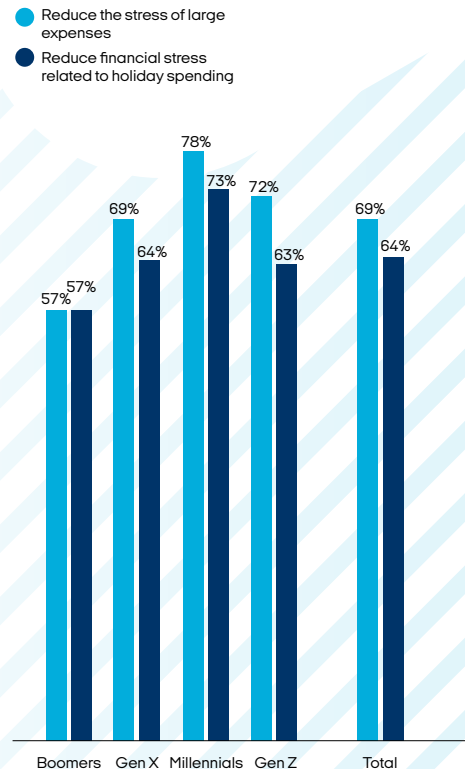
BNPL is also cheaper than using credit cards, with more than two-thirds of BNPL customers surveyed [70%] indicating that they do so to avoid paying interest-bearing credit card debt. The commercial bank interest rate on credit card usage is approximately 20.7% of the purchase value whereas the average value of using BNPL services (using Afterpay's rates to illustrate) is lower and capped at \$24. For example, consider a \$500 purchase with a credit card and with BNPL where payments are missed. The total amount owed when BNPL is used would be only \$524 by the end of the year. However, for the same purchase made using a credit card, the total amount owed would be approximately \$603 at the end of the same period.²⁸ In other words, a \$500 purchase made using a credit card would accrue almost 4-times more in interest in 12 months compared to the cost of missing BNPL payments for the same purchase.

BNPL helps avoid financial stress

In a survey by the American Psychological Association (APA), 87% of Americans said that inflation and the rising costs of everyday goods is a key reason for their stress. In this context, more than two-thirds of our survey respondents reported that **BNPL helps them reduce the stress related to large expenses [70%]; and in particular, reduce stress by spreading out costs related to holiday spending [67%]**.

The positive impacts of BNPL in helping customers to manage and alleviate financial stress were noted by a larger proportion of those aged 45 or above, i.e., customers more likely to be under pressure to spend on their families and children, especially around the holiday season.

Fig 7. BNPL services role in reducing financial stress.



The pet brand that's become a bona-fido success story

“People love flexibility and I wanted to give them that in how they wanted to pay. It removes the barriers between browsing and purchasing”

Sir Dogwood puts style and diversity first, and partners with Afterpay to make stylish products accessible to more pet lovers.

When Chaz Olajide brought Winston her small, feisty, scrappy Schnauzer home in 2013, she was struck by two things: the scarcity of fun, contemporary dog accessories, and the startling lack of diversity in the pet industry, from veterinarians through to the imagery used by pet brands.

“I’m talking [about a lack of diversity everywhere:] bloggers, even stock photos of people with dogs,” she remembers.

And so Olajide set about creating Sir Dogwood, a welcoming, pet-focused space “for people who look like me,” she says, “for voices that sound like mine, and to move the needle so the industry looks different.”

Olajide spent a year researching the concept, before launching Sir Dogwood in 2016. Seven years later, it has become a success story, shipping more than 1,300 orders of dog accessories, from cardigans and collars to shirts, scarves – even sunglasses – to pet owners around the world annually.

For a brand focused on diversity, accessibility has always been an important consideration for Olajide. She partnered

with Afterpay in 2018, saying that it was clear that payments being over time was a “huge trend”.

“I wanted to make sure I was accommodating those shoppers [who wanted to spread payments]. People love flexibility and I wanted to give them that in how they wanted to pay. It removes the barriers between browsing and purchasing.”

While Olajide was originally driven to amplify the work and voices of women and BIPOC-led brands, Sir Dogwood has

also become known for its contemporary products and unique aesthetic.

“I gravitate towards [brands] that not only put out high quality products with a clean, modern aesthetic, but [those that] feature unique designs or styles I haven’t seen anywhere else.

“I want to align our look with what you might see in women’s wear and children’s wear – and stay away from paw prints.”



3. Generating value for American customers

BNPL generated an estimated \$4.2 Billion in value to customers

While the idea of spreading payments for purchases is not new, what has propelled BNPL to prominence is the streamlining of the process, the ease of registration and the low access and use costs [including zero-interest rates if payments are made on time]. We estimate that BNPL provided American customers an overall “consumer surplus”³⁰ benefit of \$4.2 billion in the last 12 months.

The average value associated with BNPL services was estimated to be \$44 per customer per year. **Younger generations, minority groups, and students value BNPL services more, broadly in line with their usage.**

In our survey, 19% of customers said they would use **BNPL services if available to cover a large, unexpected bill or expense.** Unsurprisingly, as shown in Fig 6, the estimated consumer surplus for these customers is \$161 per customer, almost four times higher than the average BNPL customer. Similarly, customers whose BNPL expenses on essentials were over 60% of their total BNPL spending, valued the service at an estimated \$92 per customer.

Attributes of BNPL services valued by customers

As highlighted above, there are a number of reasons why BNPL customers value the service, from cost and convenience to stress-reduction related reasons. Using survey responses, we were able to estimate the consumer surplus associated with BNPL features valued by customers.

Our analysis suggests that out of the \$44 per customer in consumer surplus benefits linked to BNPL services, \$11 can be attributed to its affordability, \$8 to accessibility, \$7 to the convenience of finding merchants [see box below], a combined total of \$11 to reasons related to stress reduction, and \$4 each to convenience and the flexibility of paying in installments to better manage their finances.



BNPL is more than a just a payment method for merchants

In addition to providing convenient payment options for their partner merchants’ end-consumers, many BNPL providers have shifted to the app-driven acquisition model, which makes the apps a marketing platform to push customers to retailers through referral clicks.

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 providers] in a real-time, automated auction for ad placements on the publishers’ [BNPL providers] apps and websites.

Fig 8. Consumer surplus per customer associated with BNPL services, by type of customer \$ per user. Source: YouGov, Oxford Economics

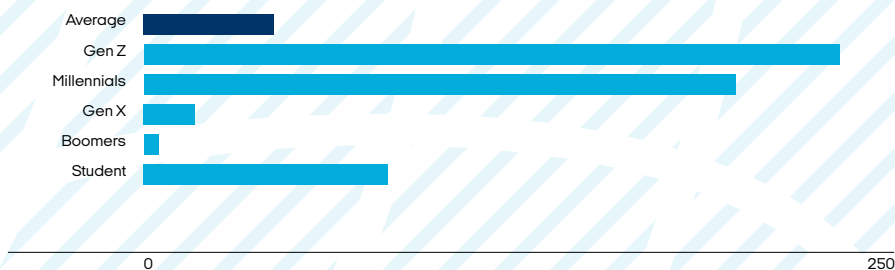
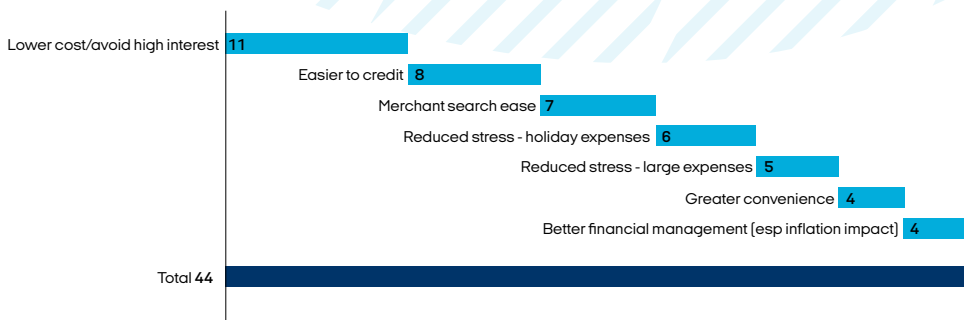


Fig 9. Consumer surplus value of various BNPL attributes, value by attribute, \$ per customer



Financially prudent customers keen to use BNPL more

The ability to spread large expenses is crucial for US consumers as it empowers them to manage financial emergencies. In 2022, payments with credit cards comprised an estimated 30% of all e-commerce sales whereas BNPL payments comprised only 5%.³¹ Despite BNPL uptake being low among the general population, it is the most preferred method of payment option for one-in-five of BNPL customers [20%] in our survey, and with half of respondents preferring it over credit cards for their purchases.

More than two-thirds [69%] of customers indicated that they would use BNPL if it were more widely available, with the demand for BNPL services being higher among Gen Z customers and Millennials [79%] and among households with an annual income of \$10,000 or less [74%].

While BNPL services help ease the financial burden of large expenses, it is often argued that the availability of cheap credit may encourage consumers to spend on items that they do not need and cannot afford.³² However, in our survey, we found that 66% of BNPL customers did not face payment difficulties, and 78% had a clear understanding of their BNPL payment commitments, allowing them to anticipate their payments in advance. This is particularly true for older customers, with more than 70% of Gen X customers and Baby Boomers indicating that they did not struggle to make a repayment and for more than 80% of this group, payments were as expected or less than expected.

4. Afterpay: a trusted and valued BNPL service

Afterpay is a leading provider of BNPL services in the US, offering payment options and facilitating connections between shoppers and merchants since 2018. Nearly a quarter of the BNPL customers surveyed had used Afterpay; and it was the most trusted [46%] and used brand [45%] among those who had tried it.

Afterpay customers also valued BNPL services more, highlighting the increased value associated with Afterpay compared to other brands. We estimated that BNPL customers obtained a value of \$44 per customer from BNPL services but Afterpay

customers valued BNPL services more. Afterpay customers valued BNPL services at \$143 per customer, over three times higher than that of the average BNPL customer. Afterpay users highly value the features unique to Afterpay, which sets it apart from other BNPL services. Their higher valuation of BNPL services is primarily due to their appreciation of Afterpay's cost-effectiveness and convenience in comparison to others. Moreover, a significant 57% of Afterpay users prefer it over credit cards, whereas only 48% of non-Afterpay customers share this preference.

Improving financial resilience

Afterpay, more than other BNPL services, was perceived by survey respondents to improve access to credit across society and enable broader financial inclusion. When Afterpay customers are faced with the hypothetical \$300 emergency expense, 27% of Afterpay customers said they would use BNPL services for the expense – much higher than the 19% for other BNPL customers.

Our survey shows that Afterpay, and BNPL more generally, is useful for better financial management rather than merely deferring financial concerns. A majority of surveyed Afterpay customers indicated that using the service helped them reduce financial stress [77%], better manage their finances [67%] and save more [60%], higher compared to other BNPL customers, of whom 69% indicated it helped reduce financial stress, 58% agreed that it helped better manage finances and 54% that it helped them save more.

Fig 10. Afterpay usage and trust among different sections of Afterpay customers. Source: Oxford Economics

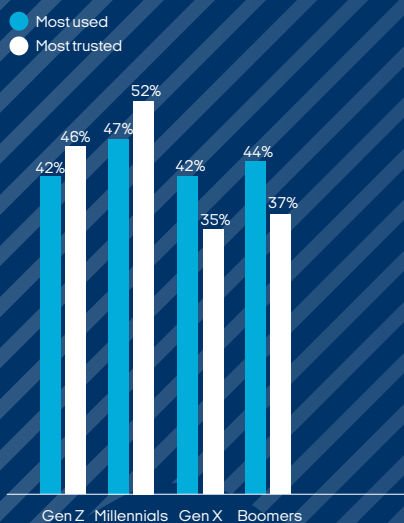
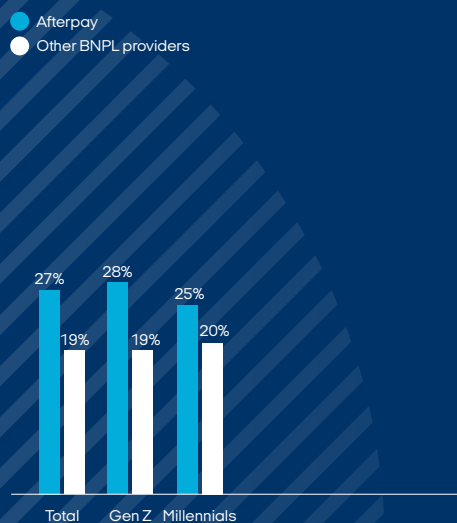


Fig 11. Preference for BNPL services to manage unexpected expenses Source: YouGov, Oxford Economics



5. Supporting US businesses and the wider economy

BNPL providers, and Afterpay in particular, have become key partners for their merchants in enabling them to adapt and compete in the modern, digital marketplace as consumers are seeking better in-store and online shopping experiences.

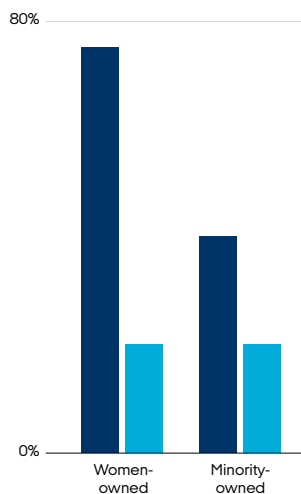
However, as highlighted in Section 1, rising living costs have made consumers more cautious about spending on non-essential items and limited their ability to afford large, essential purchases. Businesses—and SMBs in particular—have partnered with BNPL providers to help customers manage larger expenses through installment plans. This has boosted sales for businesses, mitigating the impact of the inflation to some extent, while also reducing the costs of attracting and serving customers, helping them deal with rising input costs.

Afterpay is a leading partner for American businesses

Afterpay is one of the largest BNPL partners for merchants in the US. Currently, in 2023, Afterpay has partnerships with merchants in a range of sectors such as fashion, beauty, and home goods.

Compared to the US business landscape, Afterpay has a proportionately larger share of businesses that are women-owned [73% Afterpay vs 21% US] and owned by minorities [40% Afterpay vs 20% US]. Afterpay also serves a large proportion of SMBs: 98% of merchants partnering with Afterpay are SMBs similar to businesses in the US overall.

Fig. 12. Merchants partnering with Afterpay, by business size and by ownership Source: Pureprofile, Oxford Economics



86%

of BNPL customers surveyed expressed a greater inclination to make purchases if they could spread payments without incurring fees or interest

Afterpay helped boost retail sales by \$8.6 Billion

Afterpay's BNPL services provide significant advantages for merchants in various ways. Merchants surveyed highlighted the significant impact of Afterpay on their sales. They reported that, without Afterpay, they would have lost a substantial amount of sales, even after factoring in potential sales through other payment options. Based on estimates provided by merchants, we estimate that **Afterpay generated an incremental \$8.6 billion in sales** in the 12 months to August 2023 in the US. This is substantiated by the results of our BNPL customer survey, where 86% of respondents expressed a greater inclination to make purchases if they had the option to spread payments without incurring any interest or fees. Additionally, 32% of respondents were willing to make purchases if they could spread payments, even if it involved paying some amount in fees for this service.

A number of factors contributed to the growth in sales, including:

- **Increased customer engagement:** Merchant partners are able to engage effectively with cash-strapped consumers by offering them convenient

payment options, increasing affordability and enabling more productive sales discussions.

- **Rise in repeat purchasing:** Afterpay's payment structures give customers more control over spending and support for budgeting, generating more frequent repeat purchases for merchants offering the platform.
- **Larger customer basket size:** Customer control over payments removes barriers to purchase at checkout and gives customers confidence to increase purchase value.
- **Exposure to new customers:** Merchants, especially SMBs, can leverage online shop directories provided by Afterpay to increase exposure to new customers.

These increases were driven by a variety of factors: approximately 80% of merchants believed that greater brand awareness; higher conversion rates; Afterpay promotions; better customer experience; increased web traffic; customer referrals from the shop directory; and reduced cart abandonment were important or very important.

Fig. 14 Net benefits to businesses, by size of business and ownership, % of BNPL Revenue. Source: Pureprofile, Oxford Economics

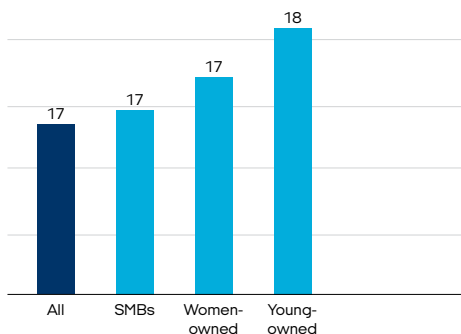


Fig. 15. GDP contribution associated with Afterpay-stimulated sales, \$ Billions.

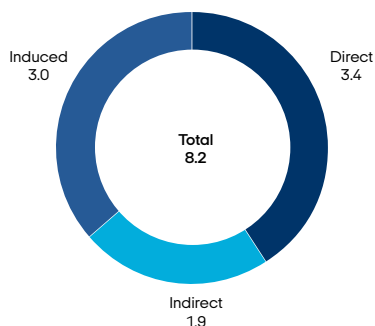
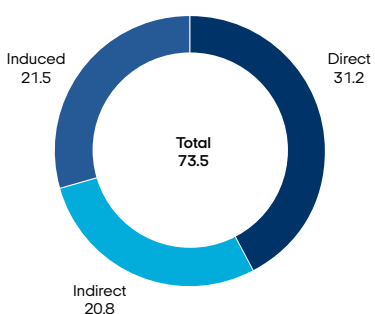


Fig. 16. Employment supported by Afterpay-stimulated sales, Jobs, Thousands.



Afterpay helps reduce costs by \$2 Billion

Merchants surveyed also indicated that Afterpay’s BNPL services have helped reduce costs by \$2.0 billion, which was attributed mainly to better organizational efficiency (3% of BNPL revenues), but also to lower customer acquisition and cross-selling costs; lower fraud rates; lower default rates; and lower customer support costs (approx. 1% of BNPL revenues each).

Afterpay generates a net benefit for businesses

The overall net benefit to businesses is noteworthy, amounting to an estimated \$5.6 billion, after accounting for other costs associated with the incremental sales.

Our analysis suggests that the impact of Afterpay varies slightly by the type of business. Estimated benefits to SMBs, and businesses owned by women or young entrepreneurs, were similar compared to the sample average.

Afterpay supports jobs and economic activity in the wider economy

As discussed previously, our survey results indicated that Afterpay supported incremental sales of \$8.6 billion, which allows businesses, especially SMBs, to support jobs and economic activity directly within their businesses, but also indirectly through their supply-chain and through employee-wage spending, estimated using our in-house Economic Impact Assessment model [see Box 3 in the Appendix below for a detailed description of Economic Impact Assessments].

Afterpay contributed \$8.2 Billion to US GDP

The incremental sales associated with Afterpay directly contributed \$8.2 billion to US GDP. This core economic footprint, equivalent to 0.5% of retail GVA.

Merchants’ operational and capital expenditure associated with these incremental sales also support economic activity among firms that supply inputs for these goods and services, and further through the supply chain. Through these channels, Afterpay indirectly supported \$1.9 billion to US GDP.

Afterpay’s impact does not end with its supply chain, as the payments it makes to its employees support further economic activity in the country. Our modeling indicates that these employee-wage spending induced expenditures contributed an additional \$3.0 billion to US GDP.

In summary, the incremental sales of \$8.6 billion contributed a total of \$8.2 billion to US GDP through direct, indirect and induced channels.

Afterpay supported 73,500 jobs in the US

Our analysis indicates that Afterpay has helped support 31,200 direct jobs; that is, people employed directly by Afterpay’s US merchant partners to support its growing customer base and transaction volume. It has also supported 20,800 jobs indirectly through the supply chains of its merchant partners, particularly in transport and distribution.

Almost 21,500 jobs were supported through the extra spending in the economy by the workers that have been directly and indirectly employed as a result of Afterpay. This includes jobs in other sectors such as real estate and business services. The total employment supported, of 73,500 jobs, represents about 2.6% of the annual growth in jobs in the year ending Q2 2023 in the US as a whole.

6. Appendix: modelling methodology

The findings presented in this report were based on a bespoke survey of 1,390 US BNPL customers, 1000 US merchants offering Afterpay services, and supplemented by data from Afterpay and other third-party sources.

A bespoke consumer survey was designed for this study and administered to a representative sample of the US population by YouGov, from which BNPL customers were identified and BNPL-specific questions were fielded to them.

Insights regarding merchants were drawn from responses to a merchant survey designed for this project. The survey was administered by Pureprofile, facilitated by Afterpay, and was fielded to a survey of US merchants using Afterpay.



Estimating consumer surplus

We draw on a methodology which has been used by economists to estimate the consumer surplus associated with services such as BNPL, which customers are able to access at zero price. Note that the measure is purely about access rather than any late fees or interest that may accrue on unpaid balances. Due to their zero access price, they are not captured in traditional measures of economic output such as GDP, but they may nevertheless contribute to consumer welfare, which GDP is often used as a proxy for.

The concept of consumer surplus

Consumer surplus is defined as the difference between consumers' willingness to pay for service and the amount that they actually pay. For instance, if a person were willing to pay up to \$15 for a book but only had to pay \$10, then that person would have \$5 of consumer surplus from the transaction. Economists consider changes in consumer surplus to be a measure of changes in consumer well-being [or welfare].

The concept of consumer surplus is analytically linked to demand curves. A demand curve shows the quantity demanded of a product or service at every level of price. For each customer, the value of access to BNPL services is given by their position on the demand curve less the price they pay. However, consumers are able to access BNPL options for payment without paying an additional cost. Therefore, the value of the consumer surplus for all BNPL customers broadly corresponds to the total area under the demand curve [as the price to customers for access is zero].

Estimating the demand curve

Economists use survey-based "stated preference" methods as one approach to estimate how much value—or consumer surplus—is created by zero-price goods or goods for which there is no market [e.g., public goods such as clean air]. One

such method is to ask individuals to estimate the amount they would be hypothetically willing to pay [WTP] for a free service, or, conversely, what they would be willing to accept to forego access. The latter is known as the "willingness-to-accept" [WTA] approach.

For this study we adopted the WTP approach given that BNPL services are free to access, and therefore a loss of access represents a change to the status quo. As part of the consumer survey, we asked participants a single yes-or-no question of "Please imagine that to use Buy Now, Pay Later [BNPL] services you had to pay an annual subscription fee. This fee would give you access to BNPL services for all BNPL providers. Without the subscription you would not be able to use any BNPL services. Would you be willing to pay \$[x] for a subscription that gives you access to all Buy Now, Pay Later services for the next 12 months? Please note, the aim of this question is to understand the value of BNPL services to you. It will not be used for pricing decisions.", with the price offered randomized.

Using the survey responses, for each service and price, we calculated the share of respondents who responded that they would prefer to keep access to the service at each price level. The raw data giving the fraction of monthly customers that would demand each product at various price points. A demand curve was estimated using these data points, which was then used to infer the total consumer surplus and the median surplus associated with BNPL services.

Attributing consumer surplus to various factors

Consumer preferences for various attributes of BNPL services were established from the survey, and the implied relative preferences for these attributes were used to define weights. These weights were then used to estimate the total consumer surplus value associated with each attribute. The list of attributes was based on discussions with Afterpay on the various features of BNPL services, and an 'other' option was provided to help identify any attributes not included in the survey.

Estimating merchant benefits

Merchant benefits were obtained by asking merchants the extent to which BNPL usage has contributed to their revenues and costs, after appropriately accounting for other channels through which these sales may have otherwise occurred. Merchants were also asked to provide estimates of the benefits (to revenues or costs) associated with different channels through which BNPL helps merchants financially. The net benefit figure also accounts for the increase in costs associated with the increase in sales through BNPL, which is based on gross margins for the retail sector obtained from US Input-Output tables.

What is an economic impact assessment?

To quantify its total economic contribution of incremental sales associated with Afterpay, we use an analytical method called an Economic Impact (EI) Assessment. This examines the impacts of three separate types of expenditure, all of which stimulate significant activity throughout the US economy:

- **The direct impact**—economic activity stemming from the incremental spending with merchants themselves.
 - **The indirect impact**—economic activity supported in the supply chain of the merchants. This impact is felt as a result of the merchants' purchases of goods and services.
 - **The induced impact, or wage expenditure impact**—this arises as employees working for the merchants, throughout their supply chains and spending on their wages; for example, in local retail and leisure establishments.
- The total economic impact of the incremental sales enabled by Afterpay is the sum of its direct, indirect, and induced impacts for that year. We have used two metrics to quantify each channel of economic impact:
- **Gross value added contribution to GDP**—this measures the contribution to the economy of each individual producer, industry, or sector in the US.
 - **Employment**—this is measured on a headcount basis, to facilitate comparisons with employment data for other businesses and industry sectors and regions sourced from national statistical databases.

Fig 26. Overview of Economic Impact Assessment model



Notes

1. Federal Reserve Bank of New York, "Balances are on the rise – so who is taking on more credit and debit card debt?", November 2022.
2. Federal Reserve Bank of New York, "Quarterly report on household debt and credit", August 2023.
3. The World Bank, "The Global Findex Database 2021", September 2022.
4. Worldpay FIS, "Global Payments Report 2023", May 2023.
5. eMarketer, "US Buy Now, Pay Later Forecast 2023", August 2023.
6. eMarketer, "US Buy Now, Pay Later Forecast 2023", August 2023.
7. Insider Intelligence, "US retail ecommerce sales will see increasing growth through to 2027", August 2023.
8. US Census Bureau, "Quarterly retail e-commerce sales", August 2023.
9. In this report, we analyze the value of BNPL services by age cohorts, categorizing them as follows: Gen Z, comprising those born between 1997 and 2012 (though limited to 18-26 year-olds in our survey); Millennials, ranging from 1981 to 1996 (ages 27 to 43); Gen X, spanning from 1965 to 1980 (ages 44 to 58); and Boomers, born between 1946 and 1964 (ages 59 to 67).
10. Financial Health Network, "Buy Now, Pay Later: Implications for Financial Health", March 2022.
11. The calculations assume that an 20.7% annual interest rate, equivalent to the commercial bank credit card interest rate, applies and the outstanding balance starts accruing interest 45 days after the purchase with monthly compounding. Commercial bank interest rates sourced from FRED Economic Data, "Commercial Bank Interest Rate on Credit Card Plans", May 2023.
12. American Psychological Association, "Stress in America", March 2022.
13. 'Consumer surplus' is the value of benefits derived from a product or service. This is the difference between the price a consumer is willing to pay to access a product or service and the price paid – which is zero for most BNPL services. Further detail on how we estimated consumer surplus is provided in the Appendix.
14. Gallup, "More in US say inflation is causing financial hardship" May 2023.
15. The Consumer Financial Protection Bureau, "CFPB study details the rapid growth of "Buy Now, Pay Later" lending", September 2022.
16. Federal Reserve Bank of New York, "Balances are on the rise – so who is taking on more credit and debit card debt?", November 2022.
17. Federal Reserve Bank of New York, "Quarterly report on household debt and credit", August 2023.
18. Federal Reserve Bank of New York, "Balances are on the rise – so who is taking on more credit and debit card debt?", November 2022.
19. Federal Reserve Bank of New York, "Quarterly report on household debt and credit", August 2023.
20. US Census Bureau, "Quarterly retail e-commerce sales", August 2023.
21. Worldpay FIS, "Global Payments Report 2023", May 2023.
22. eMarketer, "US Buy Now, Pay Later Forecast 2023", August 2023.
23. Consumer Financial Protection Bureau, "Buy Now, Pay Later: Market trends and consumer impacts", September 2022.
24. US Census Bureau data, sourced from Haver Analytics.
25. Federal Deposit Insurance Corporation, "Despite COVID-19 pandemic, record 96% of US households were banked in 2021", October 2022.
26. The World Bank, "The Global Findex Database 2021", September 2022.
27. FRED Economic Data, "Commercial Bank Interest Rate on Credit Card Plans", May 2023.
28. The calculations assume that an 20.7% annual interest rate, equivalent to the commercial bank credit card interest rate, applies and the outstanding balance starts accruing interest 45 days after the purchase with monthly compounding.
29. American Psychological Association, "Stress in America", March 2022.
30. 'Consumer surplus' is the value of benefits derived from a product or service. This is the difference between the price a consumer is willing to pay to access a product or service and the price paid – which is zero for most BNPL services. Further detail on how we estimated consumer surplus is provided in the Appendix.
31. FIS Worldpay, "The Global Payments Report 2023", May 2023.
32. Fox Business, "Over half of Gen Z consumers think BNPL encourages poor spending habits, according to Student Beans study", March 2022.



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