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# Understanding Consumer Demand for "Buy Now, Pay Later"

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#### Abstract

Consumer demand for "Buy Now, Pay Later" (BNPL) has surged, but the specific attributes consumers value remain unclear. We conduct a novel probabilistic stated choice experiment varying BNPL attributes across hypothetical scenarios to estimate consumers' underlying preferences and their willingness to pay (WTP) for each feature. Consumers have a negative WTP for the standard bundle, on average, but younger and lower income consumers have stronger demand. Simulating consumer demand with estimated preference parameters reveals that most shifts away from the standard BNPL bundle reduce demand and create a more negatively selected pool of BNPL users, especially when interest is charged.

JEL classification: G51, G41, C93, R22

Key words: BNPL, payment services, financial inclusion, probabilistic stated choices, survey experiment

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# 1 Introduction

Over the past several decades, digital-payment technologies have reshaped how consumers pay for retail purchases. By the 1990s, credit and debit cards had largely supplanted cash and checks as the dominant retail-payment methods. Since the 2010s, new fintech innovations have attempted to challenge card dominance, most notably Buy Now, Pay Later (BNPL). BNPL is a payment service that typically splits the purchase price into an upfront payment followed by interest-free installments. After first taking off in Europe and Australia, BNPL gained traction in U.S. e-commerce during the COVID-19 online-shopping surge. In terms of gross merchandise volume (GMV), BNPL activity is estimated to have increased more than sixfold from 2019 to 2023 (Cornelli et al., 2023). During the first quarter of 2024, BNPL accounted for nearly \$26 billion in e-commerce spending in the U.S., a 12% growth from the previous year, and BNPL spending is forecasted to reach \$1 trillion globally by 2025 (deHaan et al., 2024).

Despite BNPL's rapid growth, we know little about which of its features draw consumers to using BNPL. Because features such as zero interest, down-payment size, installment frequency, and credit-check requirements are most often bundled into the standard BNPL payment service, we cannot directly observe which attributes draw consumers to the payment service. In this paper, we estimate consumers' willingness to pay (WTP) for the standard BNPL plan as well as for individual BNPL features by randomizing hypothetical bundles and eliciting choice probabilities from survey respondents. Our estimates shed light on which features cause consumers to choose (or avoid) BNPL and how changes in the standard BNPL bundle might affect consumer demand. We also explore how preferences vary across consumers by demographics, income, and credit standing. These insights have implications for borrower risk profiles, the impact of regulation, and the long term sustainability of the BNPL market.

We estimate preferences for BNPL attributes using a *probabilistic stated choice methodology* by eliciting consumers' choice probabilities for a set of hypothetical choice scenarios that include different BNPL payment options along with a non-BNPL payment option. First introduced by Blass et al. (2010), this approach has been successfully applied in different settings to estimate preferences and derive consumer WTPs for features of choice alternatives (Boyer et al., 2020; Wiswall and Zafar, 2018; Koşar et al., 2022; Koşar and O'Dea, 2023). Drawing on open-ended feedback from an initial October 2023 survey, we embedded the experiment in the January, May, and September 2024 waves of the Survey of Consumer Expectations (SCE), randomly varying the BNPL attributes such as weeks between payment, size of first payment, interest rate,

<sup>&</sup>lt;sup>1</sup>An alternative approach to measuring consumers' WTPs is to directly elicit them under hypothetical scenarios. See, for example Fuster and Zafar (2021) who consider the sensitivity of households' housing demand (the price they are willing to pay for a hypothetical home) to varying financing conditions.

absence of a hard credit check, and absence of credit-bureau reporting.

We find that, on average, consumers have a negative WTP for the standard BNPL option and the share with a positive WTP aligns closely with the current share of consumers using BNPL. Deviations from the standard bundle tend to lower WTPs further, indicating that consumers demand greater compensation to move from the standard features. On average, consumers favor the 25% down-payment and oppose reporting BNPL activity to credit bureaus. Consumers strongly reject hard credit checks and non-zero interest rates, even after accounting for the implied increase in the cost of the good or the service. Although longer interest-free intervals are valued by consumers, they do not outweigh the overall negative valuation of the standard payment scheme.

Next, we explore heterogeneity in WTPs, both at the group level and for individuals. We find that younger and lower-to-middle income consumers have comparatively less negative WTPs for the standard scheme and a higher share with positive WTP. Overall, around 32% of respondents had a positive estimated WTP for the standard BNPL bundle, however those with low credit scores and those with maxed out credit cards had shares greater than 50%, suggesting negative selection in BNPL demand. The median WTP calculated using individual-level preference estimates, estimated without putting any distributional assumptions on the underlying heterogeneity, is negative, but the spread of the WTPs calculated using individual-level estimates shows that the group-level estimates mask vast heterogeneity. In fact, the general dispersion for both the standard product and its variations suggest that there are subsets of consumers who value the standard BNPL bundle as well as certain deviations from it. For instance, even though the median WTP to move from the standard bundle to one with credit reporting is negative in the overall sample, 41% of consumers have a positive WTP for adding credit reporting and this share increases to 58% and 45% for those with credit scores below 720 and those with maxed out credit cards, respectively.

What do these WTP distributions imply for the overall responsiveness of BNPL demand to universal changes in features of standard BNPL offerings, such as those resulting from regulatory changes? We conduct several counterfactual policy simulations that reveal modest to moderate size changes in expected demand for BNPL payment services, with consequential changes in the composition of the expected applicant pool. We find that a hypothetical reporting of BNPL loans to credit bureaus coupled with hard credit checks would reduce overall consumer demand for BNPL but increase demand for those with lower credit scores and lower incomes, worsening the negative selection already apparent in the standard BNPL bundle. Bundles more favorable to consumers, like extending the term of the zero interest loan, only slightly increase demand and do not alter the average credit quality of the pool of BNPL users. However, charging even a small non-zero interest rate dramatically reduces demand for BNPL and swings the pool of

consumers interested in using the service toward subprime and lower income borrowers.

Finally, to validate our preference estimates and WTP measures estimated using probabilistic stated choice data, we relate our estimated WTPs for the standard BNPL option to self-reported past and expected future use of BNPL. Respondents with higher WTPs are more likely to have used BNPL and estimated WTPs and the self-reported likelihood of future BNPL use display an increasing and statistically significant relationship. Our WTP estimates also co-vary in expected ways with self-identified openness to new credit and payment products, supporting the validity of the probabilistic stated choice experiment.

This paper advances both the descriptive and causal literatures on BNPL adoption and use. Our primary contribution is to fill a gap in research on consumer BNPL adoption. The initial work in this space was largely from descriptive surveys to characterize the types of borrowers who are more or less likely to use BNPL. Several surveys from the Consumer Financial Protection Bureau (CFPB), Philadelphia Fed, and New York Fed documented BNPL use at around 17-18% of consumers during a one year look-back period. This rate increased slightly between 2021 through 2024, reaching roughly 20% (Kleinbard et al., 2022; Shupe et al., 2023; Akana, 2022; Akana and Doubinko, 2025; Aidala et al., 2023, 2024). According to a sample of Bank of America customers, year-over-year growth in BNPL customers has slowed across all income groups in 2024, but the growth decline was largest for customers with the highest income (Bank of America Institute, 2024). In addition, they find that heavy users of BNPL services also have lower average deposit balances. These trends suggest that both the modal BNPL user and the average BNPL purchase are skewing lower income over the last few years. Using five waves of the SCE, we document past-year and expected BNPL use across demographic groups. Our descriptive results show that BNPL use is higher among younger, female, non-white, less-educated, lower-income, and lower-credit-score households. We also find that expected BNPL use patterns broadly mirror the patterns in past use.

By contrast, there are far fewer causal studies on consumers' use and preferences for BNPL. Two studies conduct randomized controlled trials that varied the availability of a BNPL option for a German ecommerce company specializing in furniture (Berg et al., 2025; Keil and Burg, 2023). This BNPL option differs from the "pay-in-four" model dominant in the U.S., instead offering consumers the ability to delay the full payment by up to roughly 30 days. Berg et al. (2025) and Keil and Burg (2023) show that offering delayed-payment BNPL boosts completed sales, especially among less credit-worthy or ad-routed consumers, suggesting impulse purchases and myopic behavior.

Studies focusing on consumer's use of BNPL in the U.S. context is even more thin. Papich (2022) leverages variation in store proximity and timing around Walmart's 2019 roll-out of Affirm. She finds that access to in-store BNPL offerings improved credit outcomes for consumers, especially those with "fair"

credit scores, resulting in fewer past due balances and higher credit scores. These findings suggest that BNPL might alleviate credit constraints and improve outcomes for less credit-worthy consumers in the context of in-store BNPL offerings. However, there still exists a gap in the literature as to *why* consumers use BNPL and which features drive them to the product. We are the first to estimate consumer demand for BNPL payment services, identifying the specific features that attract or deter adoption and how they vary across demographics.

Beyond BNPL specifically, our work aligns with studies on fintech and payment-technology adoption. Many papers discuss consumer adoption of card technologies and the implications for consumer spending, bankedness, or welfare (Borzekowski et al., 2008; Koulayev et al., 2016; Agarwal et al., 2024; Yang et al., 2007). Several other papers explore consumer behavioral responses related to payment technologies (Keys and Wang, 2019; Gathergood et al., 2021). Further, many papers explore whether fintech innovations and new payment technologies can increase access to the financial system. For instance, Berg et al. (2019) explores how digital footprints enhance credit-scoring models to score consumers who were previously unscoreable, increasing credit access to the previously unbanked or underbanked. We help contribute to this literature by studying how consumers respond to new digital payment services, focusing on the specific attributes of their offerings and how this might expand credit access to those who were previously under-served.

We also provide a new use case for the probabilistic stated choice experiment methodology in the consumer finance space. While stated choice experiments have been used extensively to study consumer behavioral choices in many domains, including in marketing, transportation, health, environmental economics and public welfare analysis<sup>2</sup>, relatively few studies have used the approach for analyzing consumer demand for financial products and payment services. Ameriks et al. (2020) and Boyer et al. (2020) employ stated choice experiments to study the demand for long-term care insurance, while Kesternich et al. (2013) examine preferences for different levels of prescription drug coverage in health insurance plans. Charles et al. (2024) study the demand for term life insurance, while Botzen and Van Den Bergh (2012) analyze consumer demand for flood insurance. Heeb et al. (2023) and Gutsche and Ziegler (2019) analyze determinants of individual sustainable investment behavior, while de Bruin et al. (2024) use the approach to investigate the demand for financial advice services. Finally, Heigl and Hinz (2025) and Wonder et al. (2008) use stated choice approaches to evaluate preferences for attributes of credit cards and auto loans.

<sup>&</sup>lt;sup>2</sup>See, for example, Hanley et al. (1998) and Lancsar and Louviere (2008). Stated choice experiments are also referred to as discrete choice experiments or hypothetical choice experiments. Louviere et al. (2000) and Street and Burgess (2007) provide a comprehensive guide to the design, implementation and interpretation of stated choice methods.

Furthermore, with the exception of Boyer et al. (2020), none of the previous studies of consumer demand for financial products and payment services have used a stated *probabilistic* choice methodology. By eliciting choice probabilities at the individual level, we directly address the incompleteness of the choice scenario descriptions typically included in stated choice experiments and allow respondents to express uncertainty about their choices in such scenarios (Blass et al., 2010). In addition, by eliciting choice probabilities for multiple scenarios at the individual level, we generate data that allow us to estimate the distribution of preferences at the individual level *without imposing any restricted forms of heterogeneity* (Wiswall and Zafar, 2018). Importantly, our approach allows us to estimate preferences for BNPL attributes that may not be typically observed in revealed preference data. Moreover, the probabilistic stated choice methodology allows us to estimate preferences for different BNPL attributes without omitted variables bias or endogeneity biases that may arise due to missing information on the characteristics of non-chosen alternatives in revealed preference data. Therefore, we believe this study highlights the value of eliciting choice probabilities in stated choice experiments.

Our findings help to characterize future BNPL demand under varying macroeconomic and regulatory regimes. In the U.S, the CFPB issued preliminary regulatory frameworks for BNPL lenders to better replicate the consumer protections extended to credit card users (Consumer Financial Protection Bureau, 2024). These included consumer protections surrounding investigative disputes, refund protections, and the provision of complete billing statements. While these proposed regulations have since been withdrawn, other changes surrounding credit reporting are beginning to roll out to consumers. In 2025, FICO announced that they would be releasing a new credit scoring model that would incorporate BNPL loans (Fair Isaac Corporation (FICO), 2025). Although not yet deployed for underwriting, our results suggest that consumers vary in their preferences for credit reporting related to BNPL. Those with higher credit scores and higher incomes are more likely to have a distaste for credit reporting, while those with low credit scores and lower incomes are more likely to have a positive willingness to pay when BNPL loans are reported to credit bureaus. This suggests that, and as we illustrate using a set of counterfactual policy simulations, high-score, high-income consumers are averse to credit reporting and might abandon BNPL if loans are reported, whereas low-score, low-income consumers are more likely to favor reporting. As a result, mandatory reporting is predicted to shift the user base toward higher-risk borrowers, creating riskier portfolios for BNPL lenders. Further, the modern BNPL lending system has yet to face a macroeconomic business cycle in the U.S. Although lenders are partially insulated from losses due to the short terms of the loans, it is yet to be seen how BNPL lenders may adjust to business cycle fluctuations. If BNPL lenders shift away from the standard BNPL bundle due to regulatory changes or macroeconomic conditions, the results from this paper can help us better understand how and which consumers may respond. For instance, we simulate the change in consumer demand

when the standard BNPL shifts away from zero interest to a small, positive interest rate. We find such a change to strongly reduce BNPL demand, especially among less risky borrowers.

The rest of the paper is organized as follows. Section 2 provides a brief discussion of the literature on BNPL lending in the U.S. New descriptive evidence on the use of BNPL is presented in section 3. Section 4 discusses the probabilistic stated choice approach, the experimental setup and the data. We describe the model and estimation in section 5. Section 6 presents the findings, while section 7 concludes.

# 2 Related Research on BNPL Lending

The academic literature on the supply and demand drivers of BNPL is limited, largely due to its recent emergence and few sources of administrative data on loans and users. On the supply side, Berg et al. (2025) studies BNPL from a merchant's perspective. They propose that BNPL operates through bundling a product with a zero percent loan so that merchants can better price discriminate across customers without observing their individual WTP for the product. They conclude that if a customer's creditworthiness is inversely correlated with their WTP for the product, then the zero percent loan acts as a subsidy in which the subsidized loan is more valuable to the less creditworthy, allowing the merchant to extract a larger surplus. They then conduct a randomized control trial in which a share of the customers of a German ecommerce furniture company are randomly offered a BNPL option for their online purchase. However, the form of BNPL in the experiment differs slightly from the typical "pay-in-four" BNPL common in the U.S. It includes an option to defer payment for their purchases until 14 days after item receipt (typically 28 days after purchase). They find that offering the BNPL option increased sales by 20%, largely due to an increase in the number of sales rather than the average sales amount. In line with the theoretical predictions, the BNPL option increased sales the most for low creditworthy customers, and the increased sales from offering BNPL far exceeded the cost of the zero interest loan subsidy and defaults. In a similar randomized control trial implemented by the same German e-commerce company, Keil and Burg (2023) finds that being offered the BNPL payment option also increased the probability that an impulsive buyer completes their purchase. These important results suggest that BNPL allows merchants to boost their sales, with much of the increased revenue coming from less credit-worthy and impulsive customers.

In the U.S. context, a few papers focus on consumer's interactions with BNPL and their short- and medium-run outcomes. Papich (2022) explores the regional roll-out of BNPL availability in Walmart stores to estimate the impact of BNPL access on credit outcomes. She finds that access to BNPL via Walmart reduces the amount and frequency of delinquencies and increases credit scores, suggesting an improvement

in financial well-being, especially among those with lower credit scores. However, other work has shown more adverse effects of BNPL use on consumer financial and spending outcomes. For example, deHaan et al. (2024) uses banking data for more than 10 million U.S. consumers and identifies users with remittances to BNPL lenders. They find that after a first-time BNPL use, consumers experience an increase in bank overdraft fees and credit card interest charges and fees compared to those who did not use BNPL. Additionally, Di Maggio et al. (2022) builds a panel of U.S. consumers using transaction-level data from bank accounts, debit cards, and credit cards to see how the use of BNPL affects consumer spending. They find that BNPL use results in increased spending over the 24 weeks after the first BNPL use, particularly toward retail spending. The magnitude of this effect is too large to be explained by reasonable discount rates or entirely by consumption smoothing. Instead, this suggests that BNPL reduces consumers' price sensitivity and decreases long-run aggregate liquidity. Although these studies help us understand how consumers perform after interacting with the BNPL market, less is known about what specifically draws consumers to BNPL and which features of BNPL lending users find most attractive. We explore these questions in the remainder of the paper.

# 3 New Descriptive Evidence on BNPL Use

To help guide the design of our stated choice experiment, we conducted several preliminary surveys to examine the current use of BNPL payment services by consumers. We did so by embedding survey modules as part of the Federal Reserve Bank of New York's Survey of Consumer Expectations (SCE). The SCE is a monthly online survey of a rotating panel of individuals. The survey is nationally representative and collects data on demographic, education, health, and economic variables for a sample of household heads.<sup>3</sup> It also elicits individual expectations about macroeconomic and household-level outcomes related to inflation, the labor market, household finance, and other variables. Each month, approximately 1,200 people are surveyed. Respondents participate in the panel for up to 12 months, with a roughly equal number rotating in and out of the panel each month. Average characteristics of respondents in the SCE match well the demographic and economic distribution of the U.S. population as captured by the ACS (see Armantier et al. (2017), Koşar et al. (2022)). The main difference in sample composition between the SCE and ACS is that, like most online samples, the respondents in the SCE tend to be somewhat more educated. To account for such differences we apply sampling weights in all our analyses.

<sup>&</sup>lt;sup>3</sup>For technical details, see Armantier et al. (2017).

As part of the June 2023, October 2023, January 2024, May 2024, and September 2024 SCE surveys<sup>4</sup> we included a set of questions asking respondents whether in the past year they had purchased anything using the BNPL option.<sup>5</sup> We also asked respondents for the percent chance that they will purchase something over the next year using a BNPL option.<sup>6</sup> We find that about 20% of responses in the five surveys indicate use of BNPL as a payment method in the past year. We also find an average reported likelihood of 18% of purchasing something over the next year using BNPL. However, there is considerable variability across groups in the rate at which BNPL was actually used over the past year. As shown in Table 1, we find BNPL use to be somewhat higher for females, Hispanic and Black respondents, and individuals without a college degree, and to be declining in age and income. These patterns are largely consistent with those found by the CFPB (Shupe et al., 2023) and the Philadelphia Fed (Akana, 2022; Akana and Zeballos Doubinko, 2024). BNPL use is also higher among those living in the South and among renters.

While we found essentially all BNPL users and non-users to have a bank account, there are considerable differences between users and non-users in their credit scores and credit access. BNPL usage is noticeably higher for those with credit scores below 720 (32.4%), those who were thirty days or more delinquent at some point during the past year (40.3%), and those reporting a probability of at most 75% of being able to come up with \$2,000 in case of an emergency. Those who applied for some other type of credit over the past year (an indicator of higher credit demand), generally were also more likely to report using BNPL in the past year, compared to those who did not apply for credit. Among those who applied for credit, BNPL use was particularly high for those who reported a credit application rejection over the past year (42.2%). When relating BNPL use to all characteristics jointly in a multivariate regression in the first column of Appendix Table A1, we found the higher rates for Black and Hispanic respondents, those with credit scores below 760 (and especially scores below 720), and those with a recent credit application, to remain statistically significant. Interestingly, after controlling for race, credit scores and a recent credit application rejection experience, lower-income respondents now report significantly lower BNPL take-up.

When comparing patterns in expected future use of BNPL to past use, we find the differences across demographic groups to be remarkably similar. This is consistent with some persistence in use by groups of

<sup>&</sup>lt;sup>4</sup>Given the rotating panel nature of the SCE, there is overlap in respondents across the five surveys. In our descriptive analysis we only include first responses to the introductory BNPL questions. Furthermore, first-time respondents in the SCE were not asked the BNPL questions.

<sup>&</sup>lt;sup>5</sup>The exact question wording was: Some stores offer payment plans with a "buy now, pay later" option, whereby customers do not pay for the full price at the time of purchase, but rather pay in several installments. (These payment plans are often offered through companies such as Affirm, Afterpay, and Klarna.) In the past year, have you purchased anything using a "buy now, pay later" option?

<sup>&</sup>lt;sup>6</sup>The question stated: "What do you think is the percent chance that you will purchase something over the next year using a "buy now, pay later" option?"

**TABLE 1:** BNPL Use by Respondent Characteristics

	Obs.	Share Using BNPL in Past Year	Avg. Prob. of Using BNPL in Next Year
All	2,606	20.1	18.4
Gender			
Female	1,303	23.5	19.8
Male	1,300	16.5***	17.0***
Race and Ethnicity			
White	2,181	17.0	16.8
Black	268	39.1***	31.0***
Asian	128	19.0	22.7**
Hispanic	247	28.3***	26.1***
Age			
18 to 39	860	23.4	23.5
40 to 59	1,090	19.2**	18.1***
60 and older	614	18.2**	14.4***
Education			
College	1,472	15.8	16.7
No College	1,133	22.4***	19.3**
Household Income	,		
< 50k	742	21.1	19.6
50k-75k	508	22.2	18.5
75k-150k	822	18.5	17.9
> 150k	521	17.5	15.9**
Credit Score	0 <b>2</b> 1	17.0	10.7
Below 720	712	32.4	27.3
720–760	448	19.8***	17.7***
Above 760	1,297	12.3***	12.7***
Census Region	1,277	12.0	12.7
Midwest	627	18.7	17.3
Northeast	495	19.1	17.3
South	908	22.6*	20.2**
West	576	18.1	17.4
Home Ownership	370	10.1	1/.4
Owner	1,805	17.7	16.2
Renter	748	17.7 24.8***	23.5***
	740	24.0	23.3
Thirty Day Delinquency in Past Year No	2 247	19.4	17.7
	2,247 154		17.7 39.0***
30 Days Delinquent on Loan in Past Year	154	40.3***	39.0
Credit Application in Past Year	1 205	10 1	14.0
No Vac	1,385	12.1	14.0
Yes	1,051	30.6***	24.9***
Yes - and rejected	205	42.2***	34.1***
Prob. of Coming up with \$2,000 in Emergency	( <del>7</del> 0	27.1	21.4
50% or Less	678	27.1	21.4
50% to 75%	153	26.4	27.7**
75% or more	1,774	15.5***	15.8***

**Note:** Table reports results from the June 2023, October 2023, January 2024, May 2024 and September 2024 SCE. Respondents appearing in multiple surveys are limited to their first response. We test for statistical differences (using a t-test) across subgroups under each bold group heading. The first group listed is the reference group and we test whether each subsequent group's average reported past use or expected future use of BNPL is statistically different from the reference group. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

individuals who have used it more in the past. Again, when regressing future use expectations on all covariates jointly in the second column of Appendix Table A1, we find statistically significantly higher expected use among Asian, Black, and Hispanic respondents; those younger than age 40; those with credit scores below 760 (especially for those with scores below 720); those with a recent credit payment delinquency; and those with a credit application over the past 12 months.

Thus, while use is fairly broad-based overall, with sizable take-up among higher educated and higher income respondents, among BNPL users we find disproportionate use by those with lower credit scores and greater unmet credit needs. Indeed, 53.9% of past BNPL users either (i) held a credit score of less than 720, (ii) reported having a credit application rejected, or (iii) were delinquent on a loan over the past year. The group's 53.9% share among users contrasts to its 33.9% share of our full sample. It is therefore unsurprising to find BNPL users on average to be more financially fragile, as measured by the average likelihood of being able to come up with \$2,000 in the next month in case of an emergency. That average probability is around 69.7% across all respondents but only 61% among those who reported using BNPL over the past year. Using data from our June and October 2023 survey modules we find BNPL users also to be less likely to rely on savings when faced with a financial shock. Among BNPL users 47% report that they would rely on savings to come up with the needed funds, much lower than the 68% for all respondents. Instead, BNPL users are more likely to rely on borrowing (from friends, family, banks, or credit cards).

Given the disproportionate use by those facing a combination of credit needs and credit constraints, BNPL appears to have an important role in expanding financial inclusion. At the same time, its significant subprime share of borrowers and its greater use by often more-indebted, young adults, contributes to increased risk and higher delinquency rates when compared to more traditional consumer credit such as credit cards (Cornelli and Pancotto, 2023). More broadly, the fact that a disproportionate share of BNPL users are already financially fragile raises questions about the resilience of BNPL lending and its performance following an adverse macroeconomic shock.

In the October 2023 survey module we also asked BNPL users about the (average) price of the item they purchased using BNPL. We found the average purchase price distribution to be right skewed: most purchase prices were relatively small, with the median (average) purchase price around \$300 (\$1000), and a non-negligible share of respondents reported an (average) purchase price between \$1,250 and \$2,000. When differentiating between those more or less financially fragile we find the distribution of purchase prices for the former to be skewed toward relatively smaller purchases, and those for the latter to have a longer right tail. Interestingly, this disparity by financial fragility cannot be fully explained by differences in household income.

Why do people use BNPL? To investigate this we asked respondents in the October 2023 SCE survey an open-ended question about their main reason(s) for using the BNPL payment option. The word cloud in Figure 1 offers a visual representation of the responses, with the size of each word indicating its frequency and prominence in answers overall.

**FIGURE 1:** Word Cloud of Qualitative Responses to Open-ended Question on Reasons for using BNPL



**Note:** The word cloud above depicts the most frequently mentioned words from an open-ended question from the October 2023 SCE in which respondents are asked "What was the main reason(s) for using the "buy now pay later" option?". The relative sizes of words represent their relative frequency across all responses. Minor spell corrections and word compounding were applied to some responses to improve the aggregation of responses.

Among the most frequently mentioned reasons, we find an emphasis on the appeal of spreading out payments, the advantages associated with a zero percent interest rate, and the ease of access and convenience. Credit is mentioned by those having poor credit, while others mention that they'd like to avoid using their credit card or that they see BNPL as a good method of building credit.<sup>7</sup> Lastly, some respondents state that they are making a purchase that they do not have money for up front or that they could otherwise not afford.

Guided by this qualitative information regarding key motivations for using BNPL services, we next turn to our experimental approach for examining quantitatively the relative importance of some of these specific BNPL attributes for different subgroups of the population.

<sup>&</sup>lt;sup>7</sup>Because BNPL lenders generally do not furnish data to credit bureaus, the latter statements may indicate some degree of misunderstanding among the product's users, unless they are referring to building credit with BNPL lenders specifically.

# 4 A Probabilistic Stated Choice Approach

#### 4.1 General Considerations

The probabilistic format for stated choice experiments was first introduced by Blass et al. (2010), which studied consumer preferences for features of electricity services, in particular electricity reliability as captured by the frequency, duration, and timing of electricity outages, as well as the pricing of electricity. Instead of asking for the most preferred choice or a ranking of choices, in this approach respondents are asked to assign probabilities to each choice among a set of alternatives. This provides respondents the opportunity to express uncertainty inherent in the incompleteness of typical scenario descriptions in stated choice experiments, which usually include only a subset of the information the respondents would have in actual choice settings.<sup>8</sup> Respondents will then form expectations about the missing parts of information. Elicited probabilities also capture better how much a respondent prefers one choice over others and about their relative ranking of choices. For example, if, among three alternatives, two are highly preferred to the third and the individual is close to being indifferent between the first two, the reported choice probabilities would be better able to reflect these preferences.

Probabilistic stated choice experiments have gained increased popularity and have been implemented to study voting behavior and preferences for political candidates (Delavande and Manski, 2015; Galesic et al., 2018), consumers' willingness to pay for electric power generated from different sources such as solar, wind, nuclear power, or natural gas (Morita and Managi, 2015), preferences for long-term care insurance products (Boyer et al., 2020), public preferences for land-use scenarios (Shoyama et al., 2013), preferences for workplace attributes (Wiswall and Zafar, 2018), and preferences for residential location attributes and moving costs (Koşar et al., 2022). For additional discussion of the approach, see Koşar and O'Dea (2023).

There are a number of considerations in designing stated choice experiments, irrespective of whether the experiment is designed to elicit binary choices, choice rankings, or choice probabilities. First, in a typical stated choice experiment, participants are asked to consider a set of hypothetical choice settings or scenarios with each describing a finite set of discrete choice alternatives. In the design, it is important to keep the number of choices within each scenario limited, with two-, three- and four-alternative formats being most common (Louviere et al. (2000)). There is considerable freedom in selecting attributes and choice alternatives. It is, in fact, an important strength of stated choice experiments that they accommodate inclusion

<sup>&</sup>lt;sup>8</sup>Blass et al. (2010) label the uncertainty that arises in hypothetical settings about unspecified attributes or states of the world in which choices ultimately will be made as "resolvable uncertainty".

<sup>&</sup>lt;sup>9</sup>A summary of design considerations for probabilistic stated choice experiments can be found in Koşar et al. (2022).

of attributes, choice options as well as variation in attributes not previously offered or observed in real-life settings and unobserved in revealed preference data. This makes such experiments particularly valuable for assessing public preferences for goods and services not traded in markets, and for services exhibiting little variation in attributes (such as standard BNPL offerings). At the same time, it is generally considered important for the choice setup to be seen as reasonably realistic. For this reason, stated-preference practitioners generally recommend including a status-quo or reference option (Johnston et al., 2017; Lancsar and Louviere, 2008), despite a risk of status-quo bias (Rabin, 1998).

Second, given the recommended small size of the choice set, it is typically only possible to vary a small subset of attributes at a time. To accommodate a larger set of attributes, it is common practice to assign respondents randomly to subsets of choice alternatives and attributes in order to reduce cognitive burden and maximize response rates in discrete choice experiments (Watson et al., 2017). It is important to instruct respondents that choice alternatives only differ in the attributes that are explicitly listed, and are otherwise identical in all other attributes. This minimizes concerns that certain choice attributes could signal other, unspecified choice characteristics. This ability to experimentally vary the choice attributes of primary interest in order to analyze their impact on choice decisions, while keeping everything else in the choice situation fixed, is a notable advantage of stated choice experiments over the use of non-experimental data.

Third, to identify preferences with respect to multiple attributes requires independent variation in each of them. For example, in case of three attributes, one would need at least four choice scenarios with independent variation in each attribute to be able to identify linear effects. Additional scenarios would be required for analyzing nonlinear effects or interaction effects. There is a large literature on the optimal design of variation in attributes across scenarios, including so-called D-efficient or D-optimal designs (Kuhfeld et al., 1994). As the findings in this literature apply to discrete choice experiments, it is unclear to what extent they apply to probabilistic stated choice experiments.

Before discussing the experimental setup chosen for our study of the relative preferences for different features of BNPL payment services, we would like to highlight again our motivations for eliciting choice probabilities rather than binary (or discrete) choice indicators. As mentioned earlier, by asking for choice probabilities, we provide respondents the opportunity to express uncertainty, resulting in richer information regarding the individual's preferences than if the respondent were forced to make a binary choice.

Another important advantage, that we will discuss in more detail in section 5.2, is that a stated choice methodology with elicited choice probabilities will allow identification of *individual-level* preferences without any parametric assumptions about the form of preference heterogeneity (Wiswall and Zafar, 2018). In

addition, unlike revealed preference analysis based on observed choice behavior, no explicit assumptions need to be made about the supply, the demand constraints, and the equilibrium mechanisms underlying observed BNPL use. Perhaps most importantly, unlike analyses based on observed BNPL choice behavior, to help identify preferences our approach avoids omitted-variable and endogeneity biases due to unobserved payment attributes or circumstances that may be correlated with any included observed choice attributes. That is, with observational data, a researcher only observes actual payment choices made. These choices may be a function of other, unobservable payment choice attributes or circumstances that in turn are likely to be correlated with the included observable attributes, the preferences for which we want to estimate. Our approach avoids this bias by experimentally manipulating payment choice attributes, while keeping everything else constant across choices.

## 4.2 Experimental Setup

In the survey experiment respondents are asked to consider a choice between three payment methods in various hypothetical purchase settings. Specifically, we asked respondents to imagine the situation where they need or decide to buy a given item for a known price, and are offered two different four-installment-BNPL payment choices as well as the option to pay the full amount at checkout, using their preferred payment method. In each scenario, the respondent is asked to report the percent chance (or chances out of 100) of choosing each payment method, where probabilities assigned to the choice alternatives must add up to 100.<sup>10</sup> Note that by including the non-BNPL choice of paying in full, we adhere to best practice, discussed in section 4.1, of including in each choice scenario a status quo option.

Across the choice scenarios, we experimentally vary different attributes of the three payment options. The selection of attributes included in the survey experiment was informed by the preliminary analysis, presented in section 3, of the BNPL features mentioned by its users as being relevant for their choice to use BNPL. These include the time between installment payments, initial payment at purchase, whether the BNPL loan (non-)payments would be reported to credit bureaus, whether application approval is required, and whether the service charges a positive interest rate. Experimental variation in the total cost of using the BNPL service was generated through discounts and interest charges. Across some scenarios we also varied the gross price of the item being purchased, which permits evaluating how preferences for BNPL attributes vary with the gross purchase amount.

To accommodate this set of attributes while keeping the cognitive burden manageable, we limited the

 $<sup>^{10}</sup>$ The online survey interface showed the running total of the choice probabilities as the respondents entered them.

choice scenarios to experimentally vary 3 different attributes at a time. We included 6 blocks of four scenarios each, for a total of 24 different scenarios. Blocks differ in the sets of attributes that were varied. Within each block, scenarios varied in the different values assigned to the three attributes across payment methods. Respondents were told that all payment choices are identical in all other aspects. To facilitate comparisons in monetary terms, in all blocks we included the net purchase price as one of the attributes. Respondents were randomly assigned to four out of the six blocks of scenarios so each individual respondent faced a total of 16 different choice scenarios within a survey.

We exogenously varied attribute levels with the intention of creating realistic variation in BNPL attribute choices. We did so by trading off practical and statistical considerations; creating sufficient variation to enable estimation, but without having choice scenarios with alternatives that are clearly dominated.<sup>11</sup>

A sample choice scenario is shown in Figure 2. A full description of all scenarios is provided in Appendix B. The three specific attributes that are varied in the scenario shown in Figure 2, are, respectively, (i) the size of a discount associated with using a BNPL payment plan, (ii) the number of weeks between installment payments and (iii) whether the payments will be reported to the credit bureaus.<sup>12</sup>

After describing the data in section 4.3, in section 5.1 we present the choice model we use to analyze the responses in the stated choice experiment. We show how the experimental variation in the BNPL attributes allows us to identify individuals' preferences for various BNPL attributes. These in turn can be used to measure individuals' willingness to pay, or their required compensation, for different BNPL attributes.

#### 4.3 **Data**

The experimental BNPL survey module was fielded as part of the January 2024, May 2024, and September 2024 SCE. A total of 1,791 participants in the experiment were randomly assigned to sets of 4 blocks of 4 scenarios each, yielding responses for a total of 43,936 individual-scenarios.<sup>13</sup> Figure 3 shows the histograms of reported probabilities for choosing payment plans A (the non-BNPL option), B (BNPL option 1) and C (BNPL option 2). Respondents tend to round their answers to end in 0 or 5, and their responses

<sup>&</sup>lt;sup>11</sup>We decided against using a so-called D-efficient or D-optimal design (Kuhfeld et al., 1994), as this approach requires the econometric model to be fully pre-specified and requires good prior information on the likely parameter values. Moreover, as previously discussed, it is unclear whether recommended designs for discrete choice experiments in which agents make binary choices, are also optimal for the case where respondents instead provide choice probabilities.

<sup>&</sup>lt;sup>12</sup>Rather than including the discount as a separate attribute in our estimation, we use it as a tool to generate additional variation in the price of the good or service.

<sup>&</sup>lt;sup>13</sup>Participation in the BNPL survey modules was restricted to those among a total of 1,791 SCE respondents who had participated in the monthly core SCE at least once. Among these respondents, 653 took the BNPL survey module twice and 151 took the BNPL module three times.

#### FIGURE 2: A sample scenario

Case 2. Suppose [if group=1 [again]] that sometime over the next month you decide to buy a new appliance such as a space heater or microwave oven costing \$200. When checking out, you are offered the option to pay for the item in **four installments spread out over a period of time, with the first payment due immediately**. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- A discount associated with using the payment plan
- The time between payments (determining whether you can repay over a short or longer period)
- Whether the payments are reported to the credit bureaus, which might have an impact on your credit score (positive if payments are made on time, negative if not)

#### Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the following scenario,

- with plan A you will need to pay \$200 at checkout without any installments and your payment will not be reported to the credit bureaus.
- with plan B, you will get a discount of 15%, which means that you will pay \$170 in total. You will pay this amount in 4 installments (\$42.5 each) with payments being 2 weeks apart. Your payments will not be reported to the credit bureaus.
- plan C offers a discount of 5%, so you will pay \$190 in total. You will make 4 payments (\$47.5 each) with payments being 3 weeks apart. In this plan, your payments will be reported to the credit bureaus.

#### Scenario 1

Payment Plan	Discount offered and total amount you pay	Time between payments	Payment reported to credit bureaus?
A (no plan)	0% \$200	Pay in full at purchase	No
В	15% \$170	2 weeks	No
C	5% \$190	3 weeks	Yes

What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

•			
A percent chance			
B percent chance			
C percent chance			
•			

exhibit mass points at 0 and 100.<sup>14</sup> The three panels in Figure 3 show that the average probabilities of choosing alternatives B and C are not equal, reaching respectively 22.7 and 21.6 percent. While this reflects nonrandom differences in average attribute characteristics in the scenarios, we also need to consider the possibility that this difference may in part reflect respondents' tendency to assign more probability to certain alternatives based on the order in which payment choices were presented, regardless of the alternative's characteristics. In our estimation we will therefore account for such potential order effects by including a fixed effect for the order of the BNPL choice alternative in the scenario shown (in our setting, the non-BNPL was always option A).

Non-BNPL Option **BNPL Option One BNPL Option Two** 80 80 60 60 Share of Cases (%) Share of Cases (%) Share of Cases (%) 40 40 20 40 60 80 100 20 40 60 80 20 40 60 Probability of Choosing Option Probability of Choosing Option Probability of Choosing Option

FIGURE 3: Distribution of Probabilities Assigned to Each Payment Plan Option

Note: Distribution based on the three choice probabilities reported in each of 43,936 individual-scenarios.

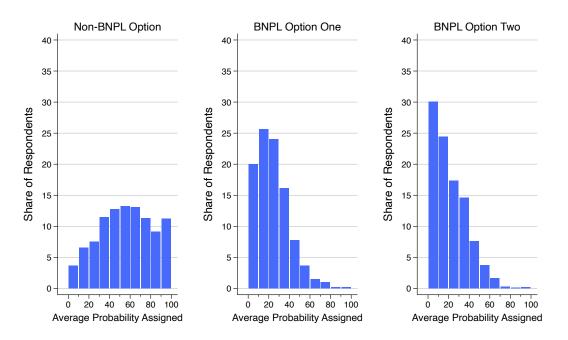
Two other features of the distributions presented in Figure 3 deserve noting. First, a relatively large mass at or close to 0% for alternatives B and C and a relatively large mass at 100% for alternative A (the non-BNPL option) suggest a general reluctance or perceived cost associated with using BNPL. This is also reflected in the average probability of 55.6% assigned to the non-BNPL option. Second, even though respondents could have responded as in a stated discrete choice setting, and assign a probability of 100% to one of the specified choice alternatives and 0% to all others, in our data, approximately 35.7% of reported probabilities across hypothetical scenarios do not match this pattern. This suggests that in studying demand for

<sup>&</sup>lt;sup>14</sup>For a more comprehensive discussion of rounding in self-reported subjective probabilities, see Giustinelli et al. (2018).

BNPL services a stated subjective probability framework is more appropriate than a stated discrete choice framework, and confirms the existence and relevance of resolvable uncertainty (Blass et al., 2010).

Of relevance for the estimation of respondent preferences for BNPL payment options in section 5, we next explore the within-person variation in reported choice probabilities across the scenarios. Figure 4 reveals that despite seeing a relatively large mass at 100% for the non-BNPL option (alternative A) and at 0% for the BNPL options (alternatives B and C) at the individual-scenario level, when averaged at the individual level, we see that only a small fraction (some 5.6%) of respondents assign exactly 100% to alternative A in all the choice scenarios they were shown. We also see about 93.2% and 89.5% of respondents assigning non-zero average probabilities to each BNPL alternative B and C across the scenarios they faced, with 88.4% assigning non-zero probabilities to both.

FIGURE 4: Within-Individual Average Probabilities Assigned to Each Payment Option



Note: Distribution based on the average probabilities assigned to each option by 1,791 respondents.

Table 2 shows the variation in the average combined probability (across all scenarios completed by the participant) assigned to the two BNPL payment options by respondent characteristics. While differences across demographic groups are in the same direction as those for actual past and expected BNPL use discussed in section 3, the gaps are generally somewhat smaller. We also relate the reported choice probabilities in the scenarios to a direct, self-identified openness to new credit and payment products such as BNPL. Specifically, we asked respondents to self-classify as being either "interested", "open", or "opposed" to using different payment plans or loan products.<sup>15</sup>

<sup>&</sup>lt;sup>15</sup>The exact question wording was: "In terms of your willingness to use different payment plans and loan

**TABLE 2:** Average Total Probability Assigned to BNPL Options

Group	Obs.	Avg.
All	1,791	45.1
Gender		
Female	887	46.4
Male	903	43.9*
Race and Ethnicity		
White	1,489	43.8
Black	187	55.9***
Asian	101	44.7
Hispanic	176	55.2***
Age		
18 to 39	602	50.1
40 to 59	763	45.0***
60 and older	400	40.6***
Education		
College	1,034	42.0
No College	757	46.8***
Household Income		
< 50k	469	50.8
50k-75k	340	46.1**
75k-150k	600	41.0***
> 150k	375	37.7***
Credit Score		
Below 720	486	58.0
720–760	277	43.6***
Above 760	921	36.9***
Thirty Day Delinquency in Past Year		
No	1,463	44.2
30 Days Delinquent on Loan in Past Year	105	70.8***
Credit Application in Past Year		
No	810	40.6
Yes	639	51.6***
Applied & Rejected	114	64.7***
Credit Card Maxed Out		
No	1,376	40.6
Yes	216	63.8***
Openness to New Credit Products		
Interested	214	63.8
Open	1,073	50.5***
Opposed	501	26.5***
BNPL Use in Past Year	501	_0.0
No	905	40.9
Yes	380	62.9***

**Note:** Table reports the average probability respondents assign to BNPL options, based on different observable characteristics. We test for statistical differences (using a t-test) across subgroups under each bold group heading. The first group listed is the reference group and we test whether each subsequent group's average reported past use or expected future use of BNPL is statistically different from the reference group. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Perhaps not surprisingly, and amounting to a type of validation of the probabilistic stated choice approach, we find higher average choice probabilities assigned to BNPL options among those who expressed an interest in new credit and payment products, followed by those open to such products and the lowest BNPL choice probabilities for those generally opposed to using different payment plans and loan products.

### 5 Model and Estimation

In this section we discuss a theoretical and empirical framework for analyzing the responses in the stated choice experiment. We first introduce a canonical random utility model (McFadden, 1974), followed by an empirical model that can be estimated using the probabilistic hypothetical payment option choice data. We discuss how the model's parameters are identified and estimated, and how these estimates can be used to compute the willingness to pay (WTP) for different features of BNPL services, and how these WTPs vary with individual's observable characteristics.

#### 5.1 Model

Let i denote an individual respondent of the choice scenario and let j represent a payment method in the hypothetical choice set  $j=1,\ldots,J$ . The utility  $u_{ij}$  associated with each alternative payment choice option is specified as a function of the total price (net of discounts and interest charges) for the goods or services denoted with  $TP_j$ , a vector of attributes describing the payment option,  $X_j$ , and  $BNPL_j$ , which is an indicator equal to unity for each BNPL payment option (with four installments). Specifically, we assume that preferences take the random-coefficients form with additive separability between the observed attributes and idiosyncratic shocks:

$$u_{ij} = \alpha_i \ln(TP_j) + (\delta_i + X_j'\beta_i)BNPL_j + \varepsilon_{ij}, \tag{1}$$

where  $\theta_i = [\alpha_i, \beta_i']$  is a vector of *individual-specific* preference parameters and  $\delta_i$  represents the *individual-specific* fixed psychological cost (when  $\delta_i < 0$ ) or benefit ( $\delta_i > 0$ ) incurred from choosing a BNPL option. The

products, which of the following best describes your situation? [Please select only one]: Opposed – am strongly opposed to using these types of payment plans and loans for various reasons; Open – am open to using something new to help me buy and pay for things I want and need and to save money; Interested – am very interested in finding ways to allow me to buy and pay for the things I want and need." As shown in Appendix Figure A1, those interested are more likely to be Black or Hispanic, to have lower household incomes and to not have a college degree. In addition, we find the highest share interested in and the lowest share opposed to using new loan products to be those with low credit scores (under 720) and those with maxed-out credit cards.

idiosyncratic, choice-specific preference shock  $\varepsilon_{ij}$  is assumed to be independent and identically distributed conditional on the choice attributes, and captures any remaining payment option-specific preferences of individual i for option j. It reflects unspecified choice attributes and circumstances that might influence preferences and is assumed to be observed by the decision maker at the time of the actual choice decision, but not known at the time of the stated choice decision and also not observed by the econometrician.

Note the distinction between what an individual is assumed to know at the time of the actual choice setting and at the time the hypothetical choice scenario is posed. While each hypothetical choice scenario specifies the values of a subset of choice attributes, we allow individuals to remain uncertain about the values of unspecified attributes and about the state of the world in the actual choice setting (so-called resolvable uncertainty), as captured by the vector  $\varepsilon_i = [\varepsilon_{i1}, \dots, \varepsilon_{iJ}]$ .

As in standard stated choice analysis, at the time of the actual choice decision we assume an individual i observes choice attributes  $TP_1, \ldots, TP_J, X_1, \ldots, X_J, BNPL_1, \ldots, BNPL_J$  and  $\varepsilon_i = \varepsilon_{i1}, \ldots, \varepsilon_{iJ}$  for all available options in the hypothetical choice set and chooses the option with the highest utility such that, individual i chooses payment option j if and only if  $u_{ij} > u_{ik}$  for all  $k \neq j$ .

Suppose now that in the probabilistic version of the stated choice scenario, each individual i forms a subjective distribution of  $\varepsilon_i$ , denoted by  $G(\varepsilon_i)$ , computes the subjective probabilities of choosing each choice alternative in an actual choice setting, and reports these probabilities for each hypothetical choice option to the researcher. More specifically, assuming that the  $\varepsilon_i$ 's are distributed i.i.d. Type I extreme value, the subjective probability that a person places on the event that realizations of  $\varepsilon_i$  will make payment plan option j optimal—conditional on  $\beta_i$ ,  $\delta_i$ , and the attributes of the available payment options—equals the following familiar formula:

$$q_{ij} = \Pr(u_{ij} > u_{ik} \ \forall \ k \neq j),$$

$$= \int \mathbb{1}\{u_{ij} > u_{ik} \ \forall \ k \neq j\}dG(\varepsilon_i)$$

$$= \frac{\exp(\alpha_i ln(TP_j) + (\delta_i + X'_j \beta_i)BNPL_j)}{\sum_{k=1}^{J} \exp(\alpha_i ln(TP_k) + (\delta_i + X'_k \beta_i)BNPL_k)}.$$
(2)

where  $\mathbb{1}\{.\}$  is the indicator function, equal to 1 if the argument is true, and 0 if not.

Note that, in the presence of resolvable uncertainty eliciting choice probabilities is more informative than asking for stated choices. Unless a person is sure about choosing a particular option, forcing a binary response would yield the option with the highest subjective probability of being chosen (the mode). Here, someone who assigns a 55 percent chance of making a particular choice is provided the opportunity to report so, instead of reporting a binary choice that he/she would only make in 55 out of 100 cases.

## 5.2 Estimation

The stated choice experiment described in section 4 yields reported subjective choice probabilities  $q_{ij}$  for each individual i, for each choice option j, for a set of 16 different choice scenarios. In order to use the elicited choice probabilities in the estimation of the random utility model, we can express log-odds ratios for each given scenario as:

$$\ln\left(\frac{q_{ij}}{q_{ik}}\right) = \alpha_i \left(\ln(TP_j) - \ln(TP_k)\right) + \left(BNPL_jX_j - BNPL_kX_k\right)'\beta_i + \delta_i \left(BNPL_j - BNPL_k\right), \ \forall \ j \neq k,$$
(3)

where  $\beta_i$  is then interpreted as the marginal change in log-odds ratios due to some change in the payment choice attributes, X while  $\delta_i$  represents the fixed non-monetary cost associated with a BNPL payment option.

As noted by Wiswall and Zafar (2018), log-odds ratios of reported probabilities in the choice scenarios, together with the variation in attributes within and across hypothetical scenarios allow us to identify and estimate the distribution of *individual-level* preferences without imposing any parametric assumptions on this distribution. Introducing a classical reporting error in the log-odds ratio, equation (3) could in principle be estimated by ordinary least squares. However, as noted in the literature and shown earlier in Figure 3, survey respondents tend to round their subjective probabilities to multiples of 5 and 10%. To deal with this issue and combat against potential biases induced by rounding, we follow the literature and introduce measurement error into the model and estimate preferences using the least absolute deviations (LAD) estimator (also known as median regression). The approach is particularly helpful in dealing with respondents whose true subjective probabilities are close to the corner values of 0% or 100%, but who round their values to 0% or 100% exactly. Such rounding is of particular concern as the log-odds ratio in those cases can go to plus and minus infinity, and OLS would break down.<sup>16</sup>

We formally introduce this rounding behavior by assuming that the reported probabilities, denoted by  $q_{ijk}^R$ , are measured with error such that

$$\ln\left(\frac{q_{ij}^R}{q_{ik}^R}\right) = \alpha_i \left(\ln(TP_j) - \ln(TP_k)\right) + \left(BNPL_jX_j - BNPL_kX_k\right)'\beta_i$$

$$+ \delta_i \left(BNPL_j - BNPL_k\right) + \mu_{ijk}, \ \forall \ j \neq k,$$

$$(4)$$

where  $\mu_{ijk}$  captures the (difference in) measurement errors. Assuming that, conditional on the included

<sup>&</sup>lt;sup>16</sup>In the LAD estimation we replace reported probabilities of zero and 1 by 0.0001 and 0.9999, respectively.

regressors, the distribution of  $\mu_{ijk}$  is symmetric with a median of 0, we obtain the following equation:

$$M\left[\ln\left(\frac{q^{R}_{ij}}{q_{ik}^{R}}\right)\right] = \alpha \left(\ln(TP_{j}) - \ln(TP_{k})\right) + \left(BNPL_{j}X_{j} - BNPL_{k}X_{k}\right)'\beta + \delta \left(BNPL_{j} - BNPL_{k}\right), \ \forall j \neq k,$$

$$(5)$$

where M is the median operator. When estimated on a sample of individuals from a given population, the parameter estimates from (5) will then represent the mean of the population distribution of  $[\alpha_i, \beta_i, \delta_i]$ . When estimated just on the log-odds ratios for a single individual (pooled across scenarios), the parameter estimates instead represent estimates of  $[\alpha_i, \beta_i, \delta_i]$ .

We conduct median regressions at different levels of aggregation. First, we estimate population-level (average) preferences. Second, we estimate the average preferences for various subgroups of the population as defined by demographic or other characteristics. Third, we estimate the model separately for each individual using data on all scenarios that the individual responds to. In each scenario there are three choice alternatives, with alternative 1 representing the no-BNPL payment option and alternatives 2 and 3 representing two different BNPL payment options. Normalizing with respect to alternative 2, we have two probability ratios for each scenario. This gives us 32 observations per individual; 64 (96) for those who took the survey twice (thrice).

Finally, to complete the empirical model we specify the elements of the vector of specific BNPL attributes,  $X_j$ , which enter the utility as:

$$\begin{aligned} u_{ij} &= \alpha_i \ln(TP_j) + \left(\delta_i + \beta_{11i} \left| \frac{FP_j}{TP_j} - 0.25 \right| \mathbbm{1} \left\{ \frac{FP_j}{TP_j} \geq 0.25 \right\} + \beta_{12i} \left| \frac{FP_j}{TP_j} - 0.25 \right| \mathbbm{1} \left\{ \frac{FP_j}{TP_j} < 0.25 \right\} \\ &+ \beta_{2i} (\text{Number of weeks between payments - 2}) \\ &+ \beta_{3i} \mathbbm{1} \{ \text{application approval required} \} + \beta_{4i} \mathbbm{1} \{ \text{payment reported to CB} \} \\ &+ \beta_{5i} \mathbbm{1} \{ \text{pay option charges interest} \} \right) BNPL_j + \varepsilon_{ij}, \end{aligned} \tag{6}$$

where  $FP_j$  is the amount of the first payment at purchase and  $TP_j$  is the total payment for the good. Note that all BNPL attributes  $X_j$  are normalized to zero at the standard BNPL attribute levels: 4 equal payments (of 25% of total price) at 0% interest, with 2 weeks between payments, no credit pulls, and no credit reporting. This specification allows for asymmetric preferences for first payments being larger and smaller than 25% of the total price of the good or service. It also includes a binary indicator to capture whether, conditional on a given price, it matters to the individual whether they are charged interest for

<sup>&</sup>lt;sup>17</sup>Strictly speaking, assuming only a symmetric distribution of preferences, we identify the center of symmetry of the preference distribution, which we refer to as the "mean preferences".

using BNPL.18

Note that we will also estimate a specification that includes two different measures for the reporting of BNPL loans to credit bureaus, corresponding to two different wordings of this BNPL attribute used across the different survey waves. In the first wave, we characterized the attribute as "Whether the payments are reported to the credit bureaus, which might have an impact on your credit score (positive if payments are made on time, negative if not)", and in the second and third waves we instead described it as "Whether ontime payments are reported to the credit bureaus, which might have a positive impact on your credit score". The goal behind the change in wording was to be able to differentiate between the relative importance consumers attach to the reporting of on-time payments versus any payment (including non-payment) to credit bureaus.

In the estimation we also include a survey wave fixed effect and a fixed effect to capture any systematic rank-order effects in the probability assigned to alternative 3 versus alternative 2 that is unrelated to the specific scenarios we show the respondents. Finally, as in Wiswall and Zafar (2018) we use repeated observations for the same respondent across experimental scenarios to estimate preferences at the individual level, therefore recovering the distribution of preferences allowing for unrestricted forms of preference heterogeneity. We estimate standard errors on the preference parameters by block bootstrap sampling of the choice scenarios within group, where each block is all of the responses of one respondent. We use 1000 bootstrap replicates.

# 6 Findings

#### **6.1** Consumer Preference Estimates

Table 3 presents the choice model estimates for the overall sample. In Appendix Table A2 we follow Delavande and Manski (2015) and present estimates after excluding those who never chose a BNPL option, defined as those who assigned a probability of 100% to the non-BNPL option in every scenario presented to them.<sup>19</sup> The estimates in the first column of Table 3 show utility to be on average strongly declining in

<sup>&</sup>lt;sup>18</sup>Note that this parameter and those associated with the total net price are separately identified by variation in the *amount* of interest charges and discounts across scenarios and payment choice options.

<sup>&</sup>lt;sup>19</sup>For this group of respondents, some 5.6% of our sample, we see no variation across scenarios and their payment choice decisions appear based on different motivations, captured in infinitely large disutility of using BNPL. These individuals tend to be older, less educated and much more likely to report being "opposed to BNPL". They also appear to be less attentive respondents, spending shorter amounts of time on the survey. When dropping never-choosers the results are qualitatively similar but indicate a somewhat lower fixed cost of BNPL use and a greater dislike of being charged interest.

the net cost of the purchase and increasing in the length of time between the (four) payments. Respondents also, on average, experience a disutility from requiring approval for the BNPL loan and the loan payments being reported to credit bureaus. They also, on average, receive considerable disutility from being charged a positive interest rate, even conditional on the net purchase costs. With respect to the amount of the first versus subsequent payments, respondents generally prefer a first payment closer to one quarter of the total net cost (that is a set of equally sized payments): utility declines as the first payment deviates further from a quarter of the price in either direction, but much more strongly if the first payment is smaller than a quarter of the price. Finally, we find that respondents on average have a large disutility from using BNPL payment plans.

**TABLE 3:** Probabilistic Choice Model Estimates

	(1)	(2)
Log Total Price	$-41.310^{***}$ $(5.695)$	$ \begin{array}{c} -41.603^{***} \\ (5.378) \end{array} $
Number of weeks btw payments - 2	$0.326^{***}$ $(0.071)$	$0.329^{***} $ $(0.064)$
Payment reported to CB	$-0.181^{***}$ (0.036)	
Payment reported to CB (Wave 1)		$-0.979^{***}$ $(0.163)$
Payment reported to CB (Wave 2 & 3)		$-0.182^{***}$ (0.028)
Approval required	$-1.424^{***}$ (0.167)	$-1.434^{***}$ (0.163)
Pay option charges interest	$-1.852^{**}$ (0.919)	$-1.822^{**}$ (0.850)
Abs value of $\frac{FP}{TP} - 0.25$ (if positive)	$-1.943^{***}$ (0.309)	$-1.957^{***}$ (0.283)
Abs value of $\frac{FP}{TP} - 0.25$ (if negative)	$-4.973^{***}$ (0.603)	-5.008*** $(0.579)$
BNPL	$-4.409^{***} \\ (0.721)$	$-4.440^{***}$ (0.667)
Observations	87,904	87,904
Individuals	1,791	1,791
Individual-Scenarios	43,952	43,952

**Note:** The estimated models also include dummies for second and third waves and a dummy to capture any systematic rank-order effects in the probability assigned to alternative 3 versus alternative 2 that is unrelated to the specific scenarios shown. Block-bootstrapped standard errors at the individual level are also clustered at the individual level and included in parentheses. \* p < 0.1, \*\*\* p < 0.05, \*\*\*\* p < 0.01.

In column 2 of Table 3 we show estimates from a specification where we allow for the effect of credit reporting to depend on the wording in the scenarios, with one referring to reporting of both on-time and late or non-payments and the other only referring to the reporting of on-time payments to the credit bureaus (which might have a positive impact on credit scores). Interestingly, respondents, on average, dislike both types of reporting, but the estimate is statistically significantly larger in absolute size when referring to the reporting of late or non-payments.

# 6.2 Consumer Willingness to pay for BNPL Bundles

To be able to better assess the relative costs and benefits associated with different BNPL payment attributes, we compute measures of willingness to pay (WTP) expressed in terms of the total purchase price of the good or service. The WTP represents the amount at which individuals are indifferent between accepting a BNPL payment option with a certain attribute and a default choice. The default choice could alternatively be using a standard BNPL payment plan without that specific attribute, or it could be the non-BNPL payment option. The former will inform on the importance of an attribute for the intensive margin choice between different BNPL options, while the latter informs on the extensive margin choice between a BNPL and a non-BNPL option.

More specifically, we compute the intensive-margin WTP for a BNPL option with a given attribute  $X_j$  changing by  $\Delta$ , keeping every other attribute constant as follows:

$$u_{ij}(TP_j, X_j, X_{k \neq j}, BNPL_j = 1) = u_{ij}(TP_j(1 + WTP_j), X_j + \Delta, X_{k \neq j}, BNPL_j = 1),$$

$$\alpha_i \ln(TP_j) + \beta_{ji}X_j + X'_{k \neq j}\beta_{ki} + \delta_i = \alpha_i \ln(TP_j(1 + WTP_j)) + \beta_{ji}(X_j + \Delta) + X'_{k \neq j}\beta_{ki} + \delta_i,$$

$$-\beta_{ji}\Delta = \alpha_i \ln(1 + WTP_j)$$

$$WTP_j = \exp\left(\frac{-\beta_{ji}\Delta}{\alpha_i}\right) - 1.$$
fraction of total price

With this formulation,  $WTP_j$  measures the amount a respondent is willing to pay (if WTP > 0) or needs to be compensated (if WTP < 0) in order to accept the change in BNPL attribute j.

Expressed instead as fraction of the price relative to the non-BNPL option, the WTP of a given attribute  $X_j$  changing by  $\Delta$  (i.e., the WTP of moving from a non-BNPL option to a BNPL option with a  $\Delta$  value for attribute  $X_j$ ), keeping every other attribute as in the standard BNPL option with an attribute vector  $\mathbf{X} = \mathbf{0}$  defined as including 2 weeks between payments, payments not reported to CB, application approval not

required, pay option does not charge interest and  $\frac{FP}{TP}=0.25$  is:

$$u_{ij}(TP_j, BNPL_j = 0) = u_{ij}(TP_j(1 + WTP_j), X_j + \Delta, \mathbf{X}_{k \neq j} = \mathbf{0}, BNPL_j = 1)$$

$$\alpha_i \ln(TP_j) = \alpha_i \ln(TP_j(1 + WTP_j)) + \beta_{ji}\Delta + \delta_i$$

$$-\beta_{ji}\Delta - \delta_i = \alpha_i \ln(1 + WTP_j)$$

$$WTP_j^e = \exp\left(\frac{-\beta_{ji}\Delta - \delta_i}{\alpha_i}\right) - 1$$
fraction of total price
$$(8)$$

Note that, this WTP also accounts for the "fixed cost" of using BNPL.

Finally, observe that the WTPs for different attributes when expressed relative to the standard BNPL versus when expressed relative to the non-BNPL alternative are related through  $\frac{1+WTP_j}{1+WTP_k} = \frac{1+WTP_j^e}{1+WTP_k^e}$ .

Table 4 displays the WTP for using a standard BNPL payment plan (compared to not using BNPL) and the WTPs for specific BNPL attributes (compared to those in a standard BNPL plan), computed using preference estimates for various sub-samples defined by different respondent characteristics.<sup>20</sup> For the overall sample, respondents express a willingness to pay for not using—or a need to be compensated for using—a (standard) BNPL payment plan of 10.1% of the purchase price. They have a willingness to pay of an additional 0.4% for not having BNPL payments (or non-payments) reported to credit bureaus (when using BNPL); an additional 3.4% for avoiding an approval, in other words a hard credit pull, at the time of purchase; an extra 4.4% for not being charged interest for using BNPL (while keeping the net purchase costs fixed); and 1.6% for increasing the period between installment payments from 2 to 4 weeks.<sup>21</sup> The table reveals a great deal of heterogeneity across demographic and consumer groups in respondents' preferences for different BNPL attributes and in the cost or disutility associated with using BNPL. Starting with the latter, we find the disutility of standard BNPL use as payment method to be weakly higher for male, older, and higher income respondents and lower for respondents who are younger, with lower incomes, and, perhaps not surprisingly, for those who used BNPL in the past year, for whom we find an average positive utility and willingness to pay for using BNPL services. Among different consumer groups, we find that those with low credit scores (below 720) display the lowest compensation needed to use standard BNPL services.

<sup>&</sup>lt;sup>20</sup>These preference estimates are from estimating the choice model for different groups separately.

<sup>&</sup>lt;sup>21</sup>When dropping never-choosers from the estimation sample, we find qualitatively similar results. Quantitative cross-group differences in WTPs are also generally comparable, but the WTP for standard BNPL payment service overall and for different groups are usually somewhat smaller in absolute value. In addition, after dropping never-choosers, we find a greater sensitivity to being charged a positive interest rate, as captured by more negative WTPs for this feature.

**TABLE 4:** Estimated Group-level WTPs for standard BNPL and for BNPL Attributes Over Standard BNPL (as share of total price)

			WTP to move from a Standard BNPL to a BNPL plan with					
	Respondents	(1) Standard BNPL	(2) 40% First Payment	(3) 15% First Payment	(4) Credit Reporting	(5) Four Week Pay Period	(6) Approval Required	(7) Charges Interest
All	1,791	-10.123***	-0.703***	-1.789***	-0.436***	1.592***	-3.388***	-4.385
		(0.360)	(0.025)	(0.096)	(0.074)	(0.163)	(0.205)	(3.198)
Female	887	-9.923***	-0.826***	-2.560***	-1.580***	2.309***	-4.313***	-11.272**
		(0.881)	(0.092)	(0.324)	(0.488)	(0.529)	(0.460)	(5.331)
Male	903	-10.259***	-0.659***	-1.554***	-0.386***	1.694***	-2.952***	-1.454
		(0.604)	(0.082)	(0.235)	(0.136)	(0.293)	(0.520)	(1.287)
White	1,489	-10.131***	-0.704***	-1.637***	-0.433***	1.598***	-3.135***	-2.083
		(0.405)	(0.063)	(0.155)	(0.088)	(0.187)	(0.338)	(1.531)
Black	187	-9.437***	-0.649*	-2.087	-0.590	1.279	-4.023***	-8.588
		(3.142)	(0.390)	(1.934)	(1.001)	(0.866)	(1.340)	(8.144)
Asian	101	-7.318****	$-0.389^*$	-1.865***	-0.562	1.336**	-3.634***	-12.832
		(2.504)	(0.202)	(0.563)	(0.419)	(0.634)	(0.911)	(10.274)
Hispanic	176	-7.119****	-0.663***	-2.014***	-0.552	1.356**	-3.867***	-6.769
•		(2.610)	(0.149)	(0.733)	(0.526)	(0.685)	(1.255)	(6.852)
18 to 39	602	-8.765***	-0.669***	-1.976***	$-0.532^{*}$	1.210***	$-3.786^{***}$	$-5.737^{'}$
		(1.196)	(0.072)	(0.266)	(0.320)	(0.381)	(0.540)	(4.422)
40 to 59	763	-10.193***	$-0.712^{***}$	-1.740***	-0.411	1.644***	-3.399***	$-7.505^{'}$
		(0.766)	(0.070)	(0.254)	(0.331)	(0.415)	(0.351)	(5.082)
60 and older	400	-12.158***	-0.852***	-0.961***	-0.009	2.466***	-1.605***	-0.983
oo ana oraci	100	(0.824)	(0.062)	(0.180)	(0.108)	(0.222)	(0.399)	(3.629)
College	1,034	-9.677***	-0.504***	-1.555***	-0.391***	1.692***	-2.956***	-2.109
Conege	1,004	(0.628)	(0.072)	(0.125)	(0.126)	(0.169)	(0.281)	(1.490)
No College	757	-11.108***	-0.831***	$-1.567^{***}$	-0.573	2.341***	-2.667***	-2.123
No College	737	(0.867)	(0.075)	(0.377)	(0.412)	(0.357)	(0.655)	(1.398)
< 50k	506	(0.867) -9.049***	-0.807***	(0.377) -1.214**	-0.139	2.199***	-2.152***	-3.269*
< 50K	300				(0.200)			
EOL 751.	275	(2.063)	(0.092)	(0.599)	,	(0.391)	(0.735)	(1.966)
50k-75k	375	-9.316***	-0.703***	-1.789***	-0.436	1.423***	-3.388***	-23.999**
751 1501	644	(1.461)	(0.093)	(0.270)	(0.391)	(0.429)	(0.512)	(9.103)
75k-150k	644	-10.131***	-0.495***	-1.637***	-0.433***	1.598***	-3.135***	-3.185
4 = 01	202	(0.685)	(0.085)	(0.150)	(0.095)	(0.210)	(0.315)	(4.106)
> 150k	393	-11.669***	-0.881***	-0.955***	-0.086	2.635***	-1.515***	-0.137
		(0.712)	(0.050)	(0.065)	(0.099)	(0.181)	(0.168)	(0.354)
Below 720	519	-3.973***	-1.118	1.998	0.760	3.733***	-10.330	-77.818**
		(1.501)	(0.859)	(1.867)	(0.802)	(1.184)	(13.191)	(26.504)
720-760	348	-9.064***	-0.796***	-2.023***	$-0.942^*$	1.155**	-3.514***	-16.035**
		(1.482)	(0.141)	(0.350)	(0.545)	(0.492)	(0.507)	(6.992)
Above 760	967	-11.772***	-0.853***	-0.955***	-0.006	2.400***	-1.593***	-0.909**
		(0.453)	(0.053)	(0.088)	(0.059)	(0.095)	(0.191)	(0.238)
Credit card not maxed out	1,411	-10.806***	-0.653***	-1.334***	-0.239	2.110***	-2.392***	-1.234**
		(0.487)	(0.110)	(0.196)	(0.149)	(0.213)	(0.421)	(0.297)
Credit card maxed out	243	1.976*	-0.890***	0.542	0.100	2.792***	-4.812***	-3.533
		(1.079)	(0.273)	(14.963)	(1.004)	(0.684)	(1.614)	(6.347)
Has not used BNPL in past ye	ar 1,028	-10.630***	-0.595***	-1.478***	-0.382**	1.976***	-2.693***	-1.352***
		(0.503)	(0.107)	(0.203)	(0.150)	(0.192)	(0.419)	(0.245)
Used BNPL in past year	432	1.649***	-0.684***	-0.684	-0.490	1.482***	-3.356***	-12.555***
1 ,		(0.540)	(0.105)	(0.485)	(0.315)	(0.387)	(0.684)	(4.104)

Note: Group-level estimates of the WTP for a standard BNPL payment plan, computed as in equation (8) with  $\Delta=0$ , are shown in column 1. Columns 2 to 8 show group-level estimates of the WTP for alternative values of BNPL attributes ( $\Delta_j$  are defined as in column headers) as computed in equation (7). Block-bootstrapped standard errors at the individual level are also clustered at the individual level and included in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Regarding heterogeneity in the valuation of BNPL attributes, we see only modest differences across demographic groups in their willingness to pay for making smaller first (down) payments (back-loading) or larger first (down) payments (front-loading). As is the case for the overall sample, most groups have a greater dislike for making a smaller (below 25%) first payment, with a general preference for the first payment being **equal** to one-fourth of the price particularly strong for female respondents, while they tend to be weaker for those who used BNPL over the past year. The WTP to avoid credit reporting is larger for female respondents and those with credit scores between 720 and 760, while the willingness to pay for a longer repayment period (with four weeks between payments instead of two weeks) is highest for those aged 60 and over, without a college degree, those with below 720 credit score and women. The willingness to pay to avoid being charged interest, or the amount needed to be compensated for being charged interest for BNPL use (conditional on using BNPL and keeping net purchase costs fixed) is considerably larger for female, middle income (between \$50,000 and \$75,000) respondents, those who used BNPL in the past year, and those with below 720 credit scores, pointing to the importance of current standard BNPL practice of not charging any interest.

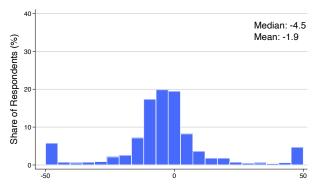
In addition to exploring heterogeneity in preferences and in WTPs across demographic groups, we also investigated whether preferences for BNPL attributes vary with the gross purchase price. We did so by estimating a version of the specification given by (6) that included interactions between the right-hand side variables and an indicator for whether the gross purchase price of the item exceeded \$600. Estimates shown in Appendix Tables A3 and A4 Panels A and B reveal a significantly smaller disutility associated with choosing a standard BNPL payment plan for higher priced items, but much greater sensitivity and higher WTPs (in absolute value) for a longer repayment period, credit reporting and being charged interest. In fact, consumers appear mostly concerned about being charged a positive interest rate (after accounting for the difference in net price) when purchasing higher priced items, but not when buying cheaper items.

As discussed earlier in section 5.2, our probabilistic choice data permit estimation of preferences at the individual respondent level. Note, however, that we can only do so for respondents who do not exclusively assign a probability of 100% to the non-BNPL option in each of the scenarios considered. For such respondents (101 respondents) the estimated utility cost of using BNPL ( $\delta_i$ ) is negative infinity, and it is not possible to identify their preferences for BNPL attributes. Similarly, for a number of additional respondents it was not feasible to obtain individual-level preference estimates: some respondents did not have enough variation in their choice probabilities as the attributes varied, leading to non-convergence in the estimation routine (200, or 11% of respondents) and for some additional respondents (176, or 9.8%) the coefficient

estimating the price sensitivity for the good was 0 or very small, leading to undefined WTP estimates.<sup>22</sup> The sample of respondents for whom we can obtain individual-level estimates is therefore skewed towards those who are somewhat less averse to BNPL payment methods. Appendix Table A5 provides the aggregate preference estimates for this restricted sample and as shown in Appendix Table A6, the skewness in this restricted sample is reflected in a group-level WTP estimate of -3.8%, compared to the -10.1% WTP for the standard BNPL option we estimated for the overall sample.

Focusing first on the WTPs for using or avoiding a standard BNPL payment plan (compared to not using BNPL) at the individual level, Figure 5 shows the histogram of these individual-level WTPs, along with the median and mean. For reference, a value of zero represents an individual who is indifferent between the standard BNPL option and the non-BNPL option. The figure has two notable features. First, consistent with the estimated group-level WTPs for the standard BNPL plan of -3.8% using the restricted sample of respondents with individual-level preference estimates, we find the mean and median of individual-level WTP estimates to be -1.9 and -4.5%, respectively. Second, the figure shows much greater heterogeneity in the WTPs across individuals than previously shown using the WTPs estimated at the group level. Some individuals are willing to pay as high as 30% or more, while some are demanding a compensation of at least 30% of the purchase price of the item to use the standard BNPL plan. A quarter of respondents would require at least a discount of 10% to use the standard BNPL option, while a quarter of respondents are willing to pay at least 1.7% to use the standard BNPL.

FIGURE 5: Distribution of Individual Level Estimates of WTP for Standard BNPL



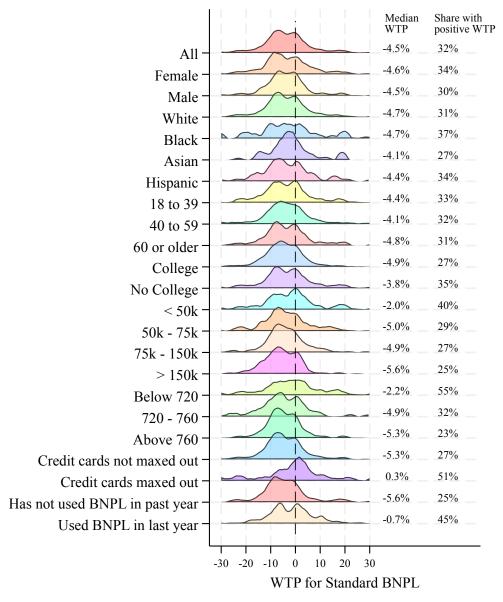
**Notes**: The chart shows the distribution of the individual-level estimates of the willingness to pay for a standard BNPL payment service as computed in equation (8) with  $\Delta = 0$ .

<sup>&</sup>lt;sup>22</sup>The analytical estimation samples in Koşar and O'Dea (2023) and Delavande and Manski (2015) similarly excluded respondents whose reported probabilities did not vary across scenarios or whose estimated income or price effects were either zero or had the incorrect sign and thus seen as non-credible respondents, who appeared not to have answered these survey questions seriously.

Figure 6 represents the within-group distribution of WTPs derived using the individual-level preference estimates. The figure also notes the median WTPs and the share of respondents with a positive WTP for the standard BNPL payment service within each consumer group. Overall, about 32% of respondents for whom we have individual-level estimates have a positive WTP for standard BNPL, and adding those who never choose a BNPL option in the experiments back to the sample as not having a positive WTP reduces this share down to 29% and to 22% when including all those without individual-level estimates. For the same sample of respondents, we find that roughly 22% used BNPL in the past year and 21% expect to use it in the next year. These rates compare favorably to the share with a positive estimated WTP. We find similar patterns for cross-group differences in the median WTP as in the group-level estimates in Table 4, with median WTP being higher for those with a credit score below 720, with maxed out credit cards and those who used BNPL in the past year. Those with incomes above \$150,000, credit scores above 760 and those aged 60 or older instead show the most negative median WTPs, implying that they need the largest compensation to use the standard BNPL. Such differences are also reflected in the share of respondents in each group with a positive WTP for BNPL.

In Figure 7 we examine the distributions of changes in WTPs associated with deviations in BNPL attributes from the standard BNPL. As was also apparent in Table 4 the median changes in WTPs associated with deviations from the standard BNPL are generally small. For example, the median change in the WTP associated with making a larger first payment, amounting to 40% of the total price, is -0.8% with a median required discount of 0.1% required for a reduction in the first payment to 15%. However, this median masks a wide spread. As indicated in Figure 7, 36% of respondents have a preference for a BNPL plan with a 40% first payment compared to the standard BNPL. Appendix Table A7 further shows that a quarter of respondents are willing to pay at least 1.5% of the total price (as opposed to requiring a discount) to be able to make the larger first payment compared to the standard BNPL and a quarter requiring at least a 2.2% discount to avoid it. For a smaller 15% down payment we find even more dispersed preferences with a quarter requiring at least 3.1% discount and a quarter seeing the smaller first payment as worth at least 6.4% of the price. We find similar patterns in preferences toward the length of time between payments. While 59% of consumers prefer a four week repayment frequency (rather than the standard two week frequency), with the median WTP estimated to be +0.6%, a quarter of respondents requires a discount of at least 1.8% to move to a four week pay period. A majority of 62% of respondents have a negative willingness to pay for a hard credit pull. The last panel shows the WTP for a BNPL scheme that has a non-zero interest rate even after accounting for the net price difference. Naturally, the distribution is left-skewed with most respondents revealing a WTP to avoid interest, but the median value of -0.9% indicates that even after accounting for the higher net purchase price (capturing the cost of interest), many consumers still have a strong distaste

**FIGURE 6:** Distribution of Individual Level WTP for Standard BNPL and Share with a WTP Greater than Zero, by Consumer Group

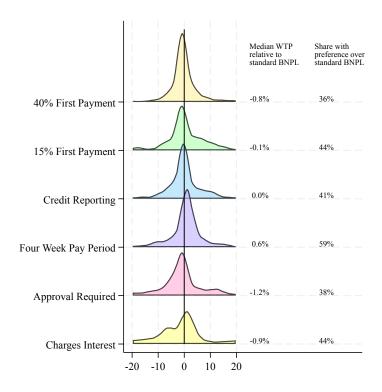


**Notes**: The chart shows the distributions of individual-level estimates of the WTP for the standard BNPL bundle for various subgroups, as computed in equation (8) with  $\Delta$  set to zero. The columns to the right of the densities report the median WTP for that subgroup and the share of the subgroup with a positive WTP.

for being charged interest in a BNPL scheme.

Appendix Figure A2 shows the WTP distributions separately for each subgroup of respondents. The plots highlight the much tighter distributions (with medians close to zero) of the WTPs for changes in BNPL attributes among higher income and high credit score respondents. They also highlight the larger heterogeneity (and more positive skew) of lower credit score respondents to being charged interest, and a

**FIGURE 7:** Distribution of Individual-Level Differences Between WTP for Standard BNPL Payment Plan and BNPL Payment Plan with Changed Attribute



**Notes**: The chart shows the distribution of the difference between individual-level estimates of the willingness to pay for the standard BNPL bundle and a change in attribute from the standard bundle, as computed in equation (8) with  $\Delta$  set to zero. The columns to the right of the densities report the median WTP deviation for that subgroup and the share of the subgroup with a preference for that bundle over the standard bundle.

more dispersed valuation of a hard credit pull approval requirement for that group.

To further examine the association between individual-level WTP for the standard BNPL plan and for deviations from the standard plan, Table 5 reports estimates from a multivariate regression in which we control for all respondent characteristics jointly. The estimates highlight the importance of low credit scores in the (positive) valuation of a smaller first payment amount and credit reporting, and the considerably less negative valuation of a hard credit pull for credit approval for respondents without a college degree.

TABLE 5: Regression of Individual-level WTPs on Observable Characteristics

		WTP to move from Standard BNPL to a plan with						
	(1) Standard BNPL	(2) 40% First Payment	(3) 15% First Payment	(4) Credit Reporting	(5) Four Week Pay Period	(6) Approval Required	(7) Charges Interest	
Female	-1.59 (2.89)	1.50 (1.46)	-2.56 (2.75)	-0.54 (1.87)	2.39* (1.29)	1.83 (2.34)	-2.95 (2.69)	
Black	-1.59 (4.95)	0.15 $(2.45)$	-0.80 (4.13)	-3.85 (3.35)	1.76 (3.02)	1.21 (4.26)	4.52 $(3.55)$	
Asian	-5.31 (5.12)	$-3.46^*$ (1.95)	4.82 (3.61)	-2.69 (2.08)	-2.60 (1.83)	0.22 $(3.49)$	-8.39 (5.58)	
Hispanic	-1.01 (3.73)	1.23 $(2.45)$	0.08 $(5.94)$	-1.00 (2.58)	-0.68 (2.64)	3.55 $(3.68)$	4.94 $(3.71)$	
18 to 39	4.62 (3.77)	2.33 $(2.12)$	-0.97 (3.90)	-2.64 (2.95)	-1.27 (2.37)	0.84 (3.31)	1.47 $(3.46)$	
40 to 59	6.27 $(3.83)$	0.37 $(1.30)$	3.35 $(3.55)$	-3.76 (2.90)	-1.46 (1.88)	-1.96 (3.08)	4.35 $(3.64)$	
No College	-1.50 (3.03)	-1.12 (1.56)	1.65 $(2.54)$	-0.38 (1.93)	-0.61 (1.35)	4.36** (2.15)	-0.51 (2.57)	
< 50k	5.97 (3.93)	0.13 $(2.10)$	-3.34 (3.88)	-1.01 (3.50)	-5.71** (2.76)	1.62 $(3.65)$	1.16 $(4.34)$	
50k-75k	3.26 (4.24)	-1.59 (2.10)	-5.85 $(4.39)$	-5.07 (3.40)	-2.96 (2.71)	-4.58 (3.33)	3.70 $(4.42)$	
75k-150k	1.92 (3.06)	-0.94 (1.63)	-0.94 (3.00)	-3.96 (2.71)	-2.38 (2.13)	-2.11 (2.62)	0.05 $(3.18)$	
Below 720	4.14 (5.00)	0.95 $(1.63)$	11.78** (5.67)	8.27* (4.46)	1.05 (1.83)	-0.34 (4.44)	-2.05 $(4.22)$	
720-760	1.38 $(3.24)$	1.21 (1.57)	9.17*** (2.97)	1.37 $(1.76)$	0.90 (1.17)	-1.37 (2.77)	-3.12 (3.50)	
30 Days Delinquent on Loan in Past Year	-6.47 (7.01)	-0.87 (3.56)	-8.91 (7.33)	-6.99 (4.51)	5.81 (5.02)	1.50 $(6.13)$	-6.78 (4.42)	
Credit Card Maxed Out	5.58 (6.10)	-0.61 (2.18)	4.77 (7.04)	0.89 (5.50)	0.19 (2.75)	0.25 (5.89)	5.64 (4.40)	
Dep. Var Mean Adj. R-Squared Observations	-1.11 0.01 1,314	0.56 0.02 1,313	4.14 0.04 1,310	0.90 0.03 1,313	1.28 0.02 1,314	-0.94 0.02 1,313	-3.86 0.04 1,313	

**Note:** The table above shows the results from separate regressions for each column where an individual's WTP for a particular BNPL bundle is regressed on individual attributes. Column 1 reports the results with the standard BNPL bundle as the outcome variable while columns 2 through 7 use the change in WTP from the standard BNPL bundle to each deviation noted in the column header. Robust standard errors are included in parentheses. \* p < 0.1, \*\*\* p < 0.05, \*\*\*\* p < 0.01.

## 6.3 Simulating Consumer Demand for BNPL Bundles

Next, we simulate how changes to the standard BNPL bundle affect consumer demand for BNPL.We estimate the extensive margin of demand using the estimated individual level preference parameters from Section 6.1 to compute the probability each consumer will choose a particular BNPL bundle instead of the default payment option. We compute this using an implementation of Equation 2 where J=2, j is the BNPL bundle specified in the column header and  $k \neq j$  is the default payment option. We use the estimated preference parameters for each respondent to compute  $q_{ij}$  and use survey weights to compute the weighted average probability of choosing the BNPL option. Table 6 details the results of this exercise for the Standard BNPL bundle along with four additional hypothetical BNPL bundles. However, note that

we only consider changes in demand, keeping all else constant, and do not consider equilibrium outcomes that incorporate changes in supply.

The first column of Table 6 shows that the average simulated consumer demand for the standard BNPL bundle, or the weighted average probability a consumer will choose BNPL over the default payment option, is 34.1%.<sup>23</sup> In the next set of rows, we report the probabilistic pool of BNPL users under the standard BNPL bundle and decompose the pool by bins of credit score and household income. The predicted pool of BNPL users under the standard BNPL bundle is composed of 53% of those with credit scores below 720, 16% with scores between 720 and 760, and 31% with scores above 760. These shares are strikingly similar to those of respondents using BNPL in the past year in the survey sample: 53% have credit scores below 720, 18% have credit scores between 720 and 760, and 29% have scores above 760. For household income, nearly half of the pool of predicted BNPL users is made up of households making less than \$50,000 per year and 11% of users are in households making more than \$150,000.

**TABLE 6:** Predicted Probability of BNPL Use And Predicted Credit Quality of BNPL Demand Under Alternate BNPL Bundles

	(1) Standard BNPL	(2)	(2) (3) (4) Standard BNPL with					
		credit reporting	credit reporting and approval required	four week pay period	interest charge			
Average probability of choosing BNPL over default option	34.1%	34.6%	31.2%	35.1%	21.8%			
Probabilistic composition of BNPL demand by:								
Credit Score:								
Below 720	53%	54%	57%	53%	70%			
720 - 760	16%	16%	15%	17%	12%			
Above 760	31%	30%	28%	30%	18%			
Household income:								
Below \$50k	49%	49%	50%	50%	60%			
\$50k - \$75k	18%	18%	19%	18%	18%			
\$75k - \$150k	22%	23%	21%	21%	16%			
Above \$150k	11%	10%	10%	11%	6%			

**Note:** The first row in the table above presents the average probability that a respondent chooses BNPL instead of the default payment option given a BNPL bundle. Since we cannot estimate preference parameters for those who never choose BNPL in any experiment, these respondents are excluded from the computations. Including these respondents and assigning zero percent probability of choosing BNPL reduces the average probability of choosing BNPL for the sample by 2.9% for each BNPL bundle. In the next set of rows, we compute the share of predicted probabilistic BNPL users by credit score bin and by household income bin to characterize the predicted credit quality of those who choose each BNPL option.

Next, we explore how consumer demand for BNPL changes if the bundle were to change from the

<sup>&</sup>lt;sup>23</sup>Again, we note that we are not able to uncover preference parameters for those who never chose BNPL throughout the experiment and thus the sample skews slightly toward BNPL use. If we were to assume zero probability for those who never choose BNPL, the average weighted probability of choosing standard BNPL over the default payment probability falls to 31.2%, a reduction of 2.9 percentage points in each bundle.

standard features. In the second column of Table 6, we find that universally adding credit reporting to the standard BNPL service is predicted to slightly increase demand for BNPL, from 34.1% to 34.6% average probability of use, however it does not uniformly increase demand across credit quality.<sup>24</sup> Demand for those with lower credit scores is predicted to increase, with their share increasing from 53% to 54%, while the share of those with prime credit scores decreases from 31% to 30%, resulting in a minor decline in average credit quality of the extensive margin of predicted BNPL demand. Meanwhile, the composition of BNPL users with universal credit reporting does not significantly change along the household income margin.

In the third column, we simulate a combination of credit reporting and approval requirements (via a hard credit pull). In this scenario, overall demand for BNPL is predicted to decline to 31.2%, representing an 8.5% decline, and average credit quality of the pool worsens further, with those with scores below 720 predicted to make up 57% of the extensive margin pool and those with prime scores making up 28% of the pool. The pool shifts slightly lower income with small increases in the two bins below \$75,000.

On the other hand, extending the term of the zero interest BNPL loan, from two weeks between payments to four weeks, increases extensive demand to 35.1%, or one percentage point, while not significantly changing the composition of BNPL users on the credit score or income margins. Lastly, we explore how charging a nominal interest rate of just 1 percent affects demand for BNPL. In this simulation, we find a substantial decline in the predicted demand for BNPL, down to 21.8% reflecting a 36% decline. In this scenario, we also find a cratering of the credit quality of the pool of consumers interested in taking up BNPL with non-zero interest. The share of subprime consumers, those with scores below 720, increases to 70% while the share of prime users, those with scores above 760, falls to 18%. Demand also shifts to much lower income groups, with 60% of the predicted pool of BNPL users making less than \$50,000 per year and only 22% making more than \$75,000 (relative to 33% under standard BNPL).

This exercise reveals several insights about the future of the BNPL market under various changes to the standard BNPL bundle. First, adding credit reporting only moderately increases demand for BNPL. This is because preferences for features of BNPL vary widely across individuals and movements away from the standard bundle may draw some new customers while repelling others. This is particularly noteworthy in the simulation with credit reporting and underwriting which drove prime borrowers away from BNPL and increased demand from those with lower credit scores. Second, bundles that make BNPL more attractive to borrowers, such as longer zero percent interest terms, only induce moderate increases to consumer demand. Extending the standard two week period between payments to four weeks only increases demand by 3%.

<sup>&</sup>lt;sup>24</sup>Note that the small increase in the *average* likelihood of choosing BNPL is not inconsistent with the zero *median* WTP reported in Figure 7.

Third, consumers strongly value the zero percent interest feature of the standard BNPL bundle, even after accounting for the price effects of the interest charges. When an inconsequential interest charge is added to the standard BNPL bundle, demand for BNPL collapses with large declines from high credit and high income households.

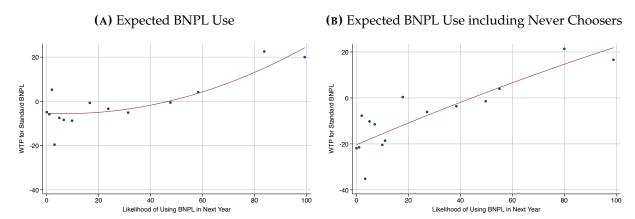
One limitation to this simulation exercise is that we only consider the extensive margin of BNPL use and do not account for repeat use. Aidala et al. (2024) reports descriptive evidence that consumers who are "financially fragile" are more often to be repeat users of BNPL, which may suggest that the induced demand for BNPL via credit reporting and underwriting on the extensive margin could understate the intensive margin use. Further, if lower credit score users are more likely to use more often, the extensive margin demand under a non-zero interest rate might also understate the intensive margin use of subprime users. Lastly, we note that our simulations only explore the *demand* for BNPL. Actual use will depend on how supply will adjust in equilibrium, which will depend on where (which merchants) and to whom BNPL services will be offered, and which borrowers would be approved. Thus while their demand for BNPL may increase, those with low credit scores may end up less likely to use BNPL when bundled with credit reporting and underwriting, if these borrowers' applications were not approved.

## 6.4 Validation: Relating Estimated Consumer WTP to BNPL Use

Finally, as a validation exercise we relate the estimated individual-level WTPs for a standard BNPL plan to actual past and expected future BNPL use. Starting with the latter, in Figure 8, we show a binned scatter plot and a quadratic fit of the individual WTPs for standard BNPL and the reported likelihood of using BNPL in the following year. As can be seen in the left panel, the WTPs estimated using the stated choice experiment are highly and meaningfully correlated with the reported likelihood of future BNPL use. Further, when we also include those who never choose a BNPL option in the scenarios by assigning them -100% WTP, the association between WTPs and the likelihood of future BNPL use becomes a stronger, monotonically increasing relationship, as shown in panel (B) of Figure 8. The last two columns of Table 7 show that this is indeed a positive and statistically significant relationship, even after controlling for the observable characteristics of the respondents. In fact, a 10 percentage point increase in the likelihood of using BNPL in the following year is associated with an average 4 percentage point increase in the WTP for the standard BNPL, which amounts to an economically meaningful 51.4% increase.

Next, we investigate whether our hypothetical choice-based preference estimates relate to actual behavior, by relating our individual-level WTP estimates for the standard BNPL to actual BNPL use in the past year. Generally, we would expect those with a high WTP for the standard BNPL be more likely to have

FIGURE 8: Expected BNPL Use vs WTP for Standard BNPL



**Note:** The figures show binscatters of the individual-level WTPs for the standard BNPL against the likelihood of using BNPL in the following year, along with a quadratic fit. The right panel also includes respondents who never choose a BNPL option in the scenarios, with a -100% WTP assigned to them.

already used BNPL and the first two columns of Table 7 show that this is indeed the case. We find a much higher average willingness to pay for the standard BNPL among those who used BNPL in the past year, even after controlling for the observable characteristics of respondents. Past-year use is associated with an average 13 percentage point increase in the WTP for the standard BNPL (17 percentage points when including never-choosers).

Overall, the findings show a robust systematic relationship between estimated preferences for BNPL payment plans and self-reported past and expected future BNPL use. This strengthens the credibility of our approach and estimates, and provides evidence that preferences recovered from probabilistic stated choice experiments are consistent with those driving actual behavior.

TABLE 7: Actual and Expected BNPL Use and Individual-level WTPs

	(1) WTP for Standard BNPL	(2) WTP for Standard BNPL	(3) WTP for Standard BNPL	(4) WTP for Standard BNPL
Used BNPL Last Year	12.35*** (4.05)	18.99*** (4.38)		
Likelihood of Using BNPL Next Year			0.26*** (0.06)	$0.42^{***} $ $(0.07)$
Never choosers		✓		✓
Controls	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Dep. Var Mean	-1.10	-8.17	-1.10	-8.17
Adj. R-Squared	0.02	0.04	0.03	0.07
Observations	1,313	1,414	1,313	1,414

Note: Columns 1 and 2 show estimates from regressing the individual WTPs for standard BNPL on the use of BNPL in the past year, while columns 3 and 4 show estimates from regressions of individual WTPs for standard BNPL on the likelihood of future BNPL use reported in the same survey. Columns 2 and 4 assign a WTP of -100 to those who never choose a BNPL option in the scenarios. Robust standard errors are in parentheses. Controls include respondent's gender, race, ethnicity, age group, household income group, credit score group and whether the respondent was thirty day delinquent in the past year. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

## 7 Conclusion

In this paper, we conduct a novel experiment to better understand consumer demand for BNPL payment schemes. We adapt a probabilistic stated choice approach to estimate consumers' willingness to pay for various attributes of BNPL payment services. We document that consumers, on average, have a negative WTP for the standard BNPL package, but at the same time some consumers have positive WTPs. Additionally, moving away from the standard package typically leads to more negative WTPs, especially in the case where a "hard" credit pull is required or when the interest rate is positive, even after accounting for interest costs in the total net price. We then explore how these WTP estimates vary across groups and find that those with lower credit scores and lower incomes have less negative WTP for the standard BNPL bundle, and more than 50% of those with credit scores below 720 and those with at least one maxed out credit card have a positive WTP. Lastly, we simulate the demand for several hypothetical BNPL bundles and find that most movements away from the standard bundle decrease the aggregate demand for BNPL and worsen the average credit quality of the pool of BNPL users. These findings lead us to conclude that groups that are more likely to be credit constrained display a stronger and more resilient demand for the BNPL product.

Our results help us better understand the consumer demand for BNPL, which can help inform whether and to what extent this payment service can continue to grow under different macroeconomic conditions and regulatory environments. First, the fact that credit constrained consumers have the highest WTPs for BNPL suggests that, at least on the demand side, the service is negatively selected. Next, deviations from

the current standard BNPL package will likely reduce consumer demand for the product. While some of these deviations, like the amount of first payment and the length of time between payments, are likely inconsequential for regulation, the imposition of credit reporting requirements or a "hard" credit inquiry could be required by regulation. If either were to be implemented, our estimates suggest that a segment of the current or potentially interested users may be dissuaded from future use, and the consumers likely most dissuaded are those with the best repayment prospects. More concretely, our individual-level preference parameter estimates imply that adding a credit reporting and application approval requirement (via a hard credit pull) would reduce the average probability of choosing BNPL (over not using BNPL) from 34.1% to 31.2% (an 8.5% reduction), while increasing the share of users with below-720 credit scores from 53% to 57% and reducing the prime share of BNPL demand from 31% to 28%. Lastly, we find that consumers receive a strong disutility when there is any non-zero interest rate charged, and especially so when considering payment plans for higher priced items, even after accounting for the cost of interest in the net price of the bundle. As such, if the market for BNPL changes in a way that it no longer allows lenders to offer zero interest, even a marginal increase in the interest rate offered would turn off potentially large swaths of the consumer market.

Our results also highlight a general current distaste for BNPL as a payment service according to respondent's individual level WTP for the standard BNPL bundle. Overall, we find that around 68% of respondents would need to be compensated some amount to use BNPL as a payment service which suggests that wide adoption in the current state is unlikely. It is unclear what drives this aversion for consumers. It could be that consumers have a status quo bias or are currently well served by their current payment services. Others may have an aversion to debt products or a distrust for new financial technologies. It is also possible that many borrowers are unaware of BNPL as a payment service. While some descriptive work has asked BNPL users why they choose to use BNPL (Aidala et al., 2024), more research is needed to better understand why consumers have a general distaste for BNPL and other new payment services.

Additionally, another largely unexplored margin of BNPL demand is the intensive margin of use. For those who do use BNPL, how often and for what purchases do they favor using BNPL rather than other options. Aidala et al. (2024) presents descriptive evidence of the intensive margin and finds that consumers who are more financially fragile are more likely to use BNPL more often and for smaller purchases which suggests that BNPL can expand credit access to those who are otherwise under-served. However, Di Maggio et al. (2022) finds that BNPL users show evidence of myopic spending behavior and higher consumption levels after their first use of BNPL. More comprehensive analysis of BNPL users, their payment histories,

<sup>&</sup>lt;sup>25</sup>Aidala et al. (2023) finds that, in a June 2023 SCE survey, 64% of those surveyed were ever offered a BNPL payment option.

and whether E	BNPL use	causes pro	oblematic	spending	behavior	is needed	to better	understand	the in	npacts
of BNPL use.										

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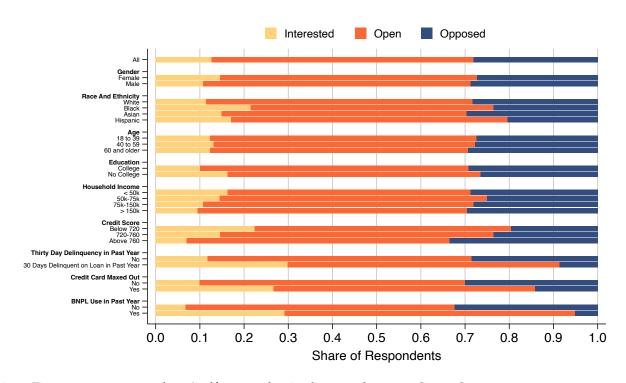
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# Appendix A Tables and Figures

FIGURE A1: Attitude Toward New Credit Products by Demographic Groups



**Note:** Figure reports respondents' self reported attitude toward new credit products.

 $\textbf{TABLE A1:} \ Controlled \ Regressions \ for \ BNPL \ Use \ and \ Expected \ Use$ 

	(1) Share Using BNPL in Past Year	(2) Prob. of Using BNPL Next Year
Female	3.61*	-0.36 (1.25)
Black	(1.93) 16.29***	(1.25) 9.53***
Asian	(4.02) $3.18$	(2.36) $5.86*$ $(3.43)$
Hispanic	(3.91) $6.75*$ $(3.71)$	6.24** $(2.60)$
Age 18 to 39	(3.71) $-2.19$ $(2.80)$	$3.07^{*}$
Age 40 to 59	$-4.51^{*}$	(1.76) $-0.28$
No College	(2.43) 3.24*	(1.50) $-0.12$ $(1.25)$
Annual hh income < 50k	(1.89) $-6.46*$	(1.25) $-0.55$
Annual hh income 50k-75k	(3.31) $-2.61$	(2.15) $-0.23$
Annual hh income 75k-150k	(3.19) $-3.10$	(2.06) $0.53$
Credit score below 720	(2.65) 13.55***	(1.78) 8.48***
Credit score 720-760	(2.88) 5.85** (2.73)	(1.72) $3.27*$ $(1.80)$
Midwest	$ \begin{array}{c} (2.73) \\ 1.48 \\ (2.82) \end{array} $	1.21 (1.86)
Northeast	0.92 $(2.91)$	0.49 (1.69)
South	$ \begin{array}{c} (2.31) \\ 1.11 \\ (2.58) \end{array} $	1.29 (1.68)
Thirty Day Delinquency in Past Year	5.09 $(4.96)$	11.37*** (3.63)
Renter	0.22 $(2.44)$	1.87 $(1.56)$
Credit Application in Past Year	$ \begin{array}{c} (2.44) \\ 12.83^{***} \\ (2.42) \end{array} $	6.38*** (1.51)
Rejected Credit Application in Past Year	5.02 $(5.02)$	3.50 $(3.21)$
Credit card maxed out	6.53 $(5.57)$	3.44 $(3.46)$
Dep. Var Mean Adj. R-Squared	19.38 0.11	18.65 0.12
Observations	2,606	2,606

**Note:** Table reports results from the June 2023, October 2023, January 2024, May 2024 and September 2024 SCE. Respondents appearing in multiple surveys are limited to their first response.

**TABLE A2:** Probabilistic Choice Model Estimates - Excluding respondents who never choose a BNPL option

	(1)	(2)
Log Total Price	$-28.185^{***}$ $(3.365)$	$ \begin{array}{c} -29.114^{***} \\ (3.770) \end{array} $
Number of weeks btw payments - 2	$0.172^{***}$ $(0.028)$	$0.178^{***}$ $(0.034)$
Payment reported to CB	$-0.148^{***}$ (0.022)	
Payment reported to CB (Wave 1)		$-0.802^{***}$ (0.120)
Payment reported to CB (Wave 2 & 3)		$-0.153^{***}$ $(0.021)$
App approval required	$-1.077^{***}$ (0.126)	$-1.112^{***} (0.127)$
Pay option charges interest	$-4.454^{***}$ $(0.645)$	$-4.244^{***}$ (0.676)
Abs value of $\frac{FP}{TP} - 0.25$ (if positive)	$-1.268^{***}$ (0.156)	$-1.310^{***}$ (0.187)
Abs value of $\frac{FP}{TP} - 0.25$ (if negative)	$-3.715^{***}$ $(0.424)$	-3.838*** $(0.440)$
BNPL	$-2.353^{***}$ $(0.446)$	$-2.382^{***}$ (0.492)
Observations	83,808	83,808
Individuals	1,690	1,690
Individual-Scenarios	41,904	41,904

Note: Bootstrapped standard errors are clustered at the individual level. The estimated models also include dummies for second and third waves and a dummy to capture any systematic rank-order effects in the probability assigned to alternative 3 versus alternative 2 that is unrelated to the specific scenarios shown. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

TABLE A3: Probabilistic Choice Model Estimates - With Gross Price Interactions

	(1)	(2)
Log Total Price	-49.989*** (1.017)	-49.897*** (0.924)
Log Total Price (if price> \$600)	0.053 $(0.105)$	0.067 $(0.113)$
Number of weeks btw payments - 2	0.662*** (0.044)	$0.652^{**}$ $(0.042)$
Number of weeks btw payments - 2 (if price> \$600)	$0.424^{***}$ $(0.055)$	0.459*** (0.060)
Payment reported to CB	0.124 $(0.094)$	
Payment reported to CB (if price> \$600)	$-2.101^{***}$ $(0.675)$	
Payment reported to CB (Wave 1)		$-0.903^{**}$ $(0.222)$
Payment reported to CB (Wave 1) (if price> \$600)		$0.000 \\ (0.000)$
Payment reported to CB (Wave 2 & 3)		0.179** (0.069)
Payment reported to CB (Wave 2 & 3) (if price> \$600)		$-2.150^{**}$ $(0.740)$
Approval required	$-0.455^{***}$ (0.083)	$-0.425^{**}$ (0.087)
Approval required (if price> \$600)	0.007 $(0.185)$	-0.002 $(0.154)$
Pay option charges interest	0.330*** (0.120)	0.300** (0.137)
Pay option charges interest (if price> \$600)	$-6.196^{***}$ $(0.652)$	$-6.257^{**}$ $(0.710)$
Abs value of $\frac{FP}{TP} - 0.25$ (if positive)	-0.496** $(0.248)$	$-0.715^{**}$ $(0.276)$
Abs value of $\frac{FP}{TP} - 0.25$ (if positive) (if price> \$600)	$-2.654^{***}$ (0.132)	$-2.557^{**}$ $(0.132)$
Abs value of $\frac{FP}{TP} - 0.25$ (if negative)	-2.196** (1.083)	-2.086** $(1.035)$
Abs value of $\frac{FP}{TP} - 0.25$ (if negative) (if price> \$600)	$-13.081^{***}$ $(4.380)$	$-12.785^{**}$ $(4.786)$
BNPL	$-6.714^{***}$ (0.180)	$-6.740^{**}$ (0.162)
BNPL (if price> \$600)	5.115*** (0.162)	5.117*** (0.157)
Observations Individuals Individual-Scenarios	87,904 1,791 43,952	87,904 1,791 43,952

Note: Bootstrapped standard errors are clustered at the individual level. The estimated models also include dummies for second and third waves and a dummy to capture any systematic rank-order effects in the probability assigned to alternative 3 versus alternative 2 that is unrelated to the specific scenarios shown. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

**TABLE A4:** Panel A: Estimated Group-level WTPs for standard BNPL and for BNPL Attributes Over Standard BNPL (as share of total price) - With Gross Price Interactions, when item price \$600

			Low-price WTP to move from a Standard BNPL to a BNPL plan with						
	Respondents	(1) Standard BNPL	(2) 40% First Payment	(3) 15% First Payment	(4) Credit Reporting	(5) Four Week Pay Period	(6) Approval Required	(7) Charges Interest	
All	1,791	-12.569***	-0.149** (0.07c)	-0.657** (0.327)	0.248	2.683***	-0.906*** (0.175)	0.662**	
Female	887	(0.187) $-12.523***$	(0.076) $-0.078$	(0.327) $0.420$	$(0.191)$ $-1.927^*$	(0.146) 2.751***	(0.175) $-0.925***$	(0.259) $0.370$	
Male	903	(0.417) $-12.552***$	(0.077) $-0.189**$	(1.285) $-0.665***$	(1.038) 0.316**	(0.128) $2.903***$	(0.193) $-0.793***$	(1.522) $0.066$	
White	1,489	(0.418) $-12.655***$	(0.076) $-0.116***$	$(0.150) \\ -0.556$	$(0.149) \\ -0.000$	(0.150) $2.840***$	(0.197) $-0.732***$	(0.366) $0.387$	
Black	187	(0.263) $-11.436***$	$(0.043) \\ -0.032$	(0.353) $4.746*$	(0.231) $-2.908*$	(0.086) $2.593***$	(0.123) $-1.229$	(0.269) $-3.838$	
Asian	101	(2.202) $-9.783***$	(0.589) $0.191$	$(2.800) \\ -1.430$	$(1.492) \\ -0.317$	(0.680) $1.835**$	(1.275) $-2.682*$	(4.963) $-1.688$	
Hispanic	176	(2.136) $-10.441***$	$(0.568) \\ 0.044$	(1.337) $2.019$	$(0.693) \\ -0.073$	(0.850) $2.334***$	$(1.504) \\ -1.727$	(6.339) $-1.689$	
18 to 39	602	(1.933) -11.286***	(0.347) $-0.165$	(2.325) $-1.120***$	(1.120) $-0.928$	(0.634) 2.191***	(1.190) -1.589**	(4.871) 1.308	
40 to 59	763	(0.634) -12.538***	(0.156) $-0.162$	(0.331) 0.158	(0.796) $-0.359$	(0.298) 2.624***	(0.625) -0.969***	(1.278) $0.726$	
		(0.488)	(0.119)	(1.107)	(0.845)	(0.227)	(0.372)	(1.214)	
60 and older	400	-12.954*** $(0.759)$	-0.234*** (0.059)	$-0.468^*$ (0.250)	0.391*** (0.102)	2.941*** (0.065)	-0.390** (0.162)	0.140 $(0.293)$	
College	1,034	$-11.647^{***}$ $(0.454)$	-0.165 (0.123)	-0.628** (0.296)	0.000 (0.095)	2.757*** (0.249)	-0.914** $(0.410)$	-0.218 (0.632)	
No College	757	$-12.587^{***}$ $(0.709)$	-0.093 (0.164)	-0.582 (0.678)	0.154 $(0.261)$	2.801*** (0.104)	$-0.827^{***}$ $(0.245)$	0.582 $(0.371)$	
< 50k	506	$-11.769^{***}$ $(0.821)$	0.043 (0.323)	3.190** (1.590)	0.191 (0.421)	2.839*** (0.243)	-0.737 $(0.531)$	-1.740 (1.463)	
50k-75k	375	$-11.274^{***}$ $(1.042)$	-0.049 $(0.226)$	0.240 (1.259)	-1.216 $(1.046)$	2.378*** (0.459)	-1.511 (0.956)	$-14.029^*$ $(8.247)$	
75k-150k	644	$-12.653^{***}$	$-0.116^{'}$	$-0.556^{'}$	0.193	2.839***	$-0.734^{'}$	$-0.057^{'}$	
> 150k	393	(0.618) $-12.467***$	(0.097) $-0.460***$	(0.525) $-0.671***$	(0.188) 0.000	(0.321) 2.707***	(0.518) $-1.009***$	(0.705) 0.766*	
Below 720	519	(0.502) $-4.729$	(0.150) 1.309	(0.092) $3.328$	(0.030) $-0.609$	(0.120) $1.239$	$(0.136)$ $-3.819^*$	(0.197) $-11.918$	
720-760	348	(3.397) $-11.198***$	$(1.162) \\ -0.130$	$(3.746) \\ -0.758$	$(22.959) \\ -1.297$	(1.763) 2.119***	$(1.954) \\ -1.751*$	(16.277) $-3.264$	
Above 760	967	$(1.070) \\ -12.635***$	$(0.225) \\ -0.176*$	$(1.064) \\ -0.645***$	$(1.041) \\ 0.000$	(0.449) $2.738***$	(0.898) $-0.804***$	(6.160) 0.558*	
Credit card not maxed out	1,411	(0.231) $-12.614***$	$(0.092) \\ -0.127***$	$(0.091) \\ -0.571***$	$(0.000) \\ 0.000$	(0.105) $2.822***$	$(0.055) \\ -0.788***$	(0.056) 0.542*	
Credit card maxed out	243	$(0.218) \\ 0.547$	$(0.017) \\ 0.547$	$(0.044) \\ 6.497$	$(0.022) \\ -0.544$	(0.017) $1.373**$	(0.019) $-3.565***$	(0.045) $-6.325$	
Has not used BNPL in past ye		(0.918) $-12.625***$	(0.462) $-0.103**$	(1.6e + 29) -0.566***	(1.321) $0.000$	(0.662) $2.828***$	(1.277) $-0.771***$	(7.258) 0.525*	
Used BNPL in past year	432	$(0.249)$ $0.685^*$	(0.040) 0.410**	(0.143) $0.000$	$(0.030)$ $-0.680^{***}$	(0.057) 1.094***	(0.023) $-4.093***$	$(0.025)$ $-10.532^*$	
		(0.379)	(0.172)	(1.142)	(0.219)	(0.392)	(0.896)	(4.031)	

Note: Group-level estimates of the WTP for a standard BNPL payment plan, computed as in equation (8) with  $\Delta=0$ , are shown in column 1. Columns 2 to 8 show group-level estimates of the WTP for alternative values of BNPL attributes ( $\Delta_j$  are defined as in column headers) as computed in equation (7). The choice model estimates come from a model where price of the good/service being larger than \$600 is interacted with all of the BNPL attributes, including the fixed costs. Block-bootstrapped standard errors at the individual level are also clustered at the individual level and included in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

**TABLE A4:** Panel B - Estimated Group-level WTPs for standard BNPL and for BNPL Attributes Over Standard BNPL (as share of total price) - With Gross Price Interactions, when item price>\$600

			High-price WTP to move from a Standard BNPL to a BNPL plan with						
R	espondents	(1) Standard BNPL	(2) 40% First Payment	(3) 15% First Payment	(4) Credit Reporting	(5) Four Week Pay Period	(6) Approval Required	(7) Charges Interest	
	*				1 0		•		
All	1,791	-3.152***	-0.942***	-4.485***	-3.883***	4.446***	-0.892*	-11.083***	
F1-	887	(0.062) $-3.095***$	(0.044) $-0.901***$	(1.402) $-6.123$	(1.439) $-5.451$	(0.134) $4.323****$	(0.467)	(1.428) $-12.508***$	
Female	887						-5.734		
Male	002	(0.073)	(0.037)	(4.629)	(4.746)	(0.112)	(3.585)	(4.630)	
Maie	903	-3.185***	-0.965***	-4.543***	-4.008***	4.517***	-0.398	-10.781***	
White	1 400	(0.057)	(0.041)	(1.135)	(1.171)	(0.128)	(0.494)	(1.208) $-11.051***$	
wnite	1,489	-3.126***	-0.923***	-4.543*** (0.476)	-3.890***	4.390***	-0.641*		
DI 1	1.07	(0.036)	(0.026)	(0.476)	(0.488)	(0.077)	(0.381)	(0.481)	
Black	187	-3.057***	-0.874***	-13.513	-12.965	4.242***	-0.190	-7.359	
<b>.</b> :	101	(1.081)	(0.185)	(15.605)	(15.922)	(0.612)	(1910.389)	(7.384)	
Asian	101	-2.877***	-0.744***	-3.824	-2.653	3.855***	-2.738	-10.885*	
	4=4	(0.840)	(0.162)	(2.378)	(2.555)	(0.497)	(6.265)	(6.127)	
Hispanic	176	-2.759***	-0.830***	-41.203**	-41.198**	4.621***	-37.076***	-3.861	
		(0.597)	(0.131)	(17.646)	(18.067)	(0.515)	(12.798)	(5.619)	
18 to 39	602	-3.165***	-0.951***	-6.430*	-5.903	4.474***	-1.791	-7.634*	
		(0.302)	(0.089)	(3.835)	(3.978)	(0.266)	(1.850)	(4.001)	
40 to 59	763	-3.163***	-0.949***	$-4.085^*$	-3.494	4.470***	-1.579	-11.727***	
		(0.110)	(0.064)	(2.298)	(2.354)	(0.194)	(2.064)	(2.724)	
60 and older	400	-3.221***	-0.991***	-4.841**	-4.384**	4.595***	-0.246	-10.797***	
		(0.133)	(0.037)	(2.073)	(2.131)	(0.118)	(0.622)	(2.275)	
College	1,034	-3.096***	-0.901***	-4.543***	-3.831***	4.326***	-0.865	-10.202***	
		(0.080)	(0.046)	(0.190)	(0.243)	(0.140)	(0.770)	(0.402)	
No College	757	-3.105***	-0.908***	-24.128**	-23.917**	4.346***	-22.456***	-4.036*	
		(0.056)	(0.038)	(10.141)	(10.355)	(0.125)	(7.989)	(2.300)	
< 50k	506	-3.123***	-0.921***	-3.130	-2.435	4.384***	-4.518	-2.936	
		(0.293)	(0.091)	(7.507)	(7.667)	(0.323)	(6.703)	(2.713)	
50k-75k	375	-3.070***	-0.883***	-23.388***	-23.105***	4.271***	-15.320*	-3.920	
		(0.430)	(0.128)	(8.792)	(8.963)	(0.394)	(8.364)	(6.496)	
75k-150k	644	-3.125***	-0.922***	-4.543***	-3.889***	4.388***	2.007	-10.984***	
		(0.246)	(0.059)	(0.260)	(0.305)	(0.186)	(3.348)	(0.473)	
> 150k	393	-3.084***	-0.893***	-3.915****	-3.162***	4.300***	0.093	-10.760***	
		(0.506)	(0.039)	(0.284)	(0.353)	(0.126)	(0.232)	(0.666)	
Below 720	519	-0.257	$-0.649^*$	-4.955	-3.557	5.256***	-5.389	1.386	
		(1.393)	(0.381)	(3.401)	(3.392)	(0.881)	(31.063)	(183.216)	
720-760	348	$-3.134^{***}$	-0.929***	$-17.019^{***}$	$-16.693^{***}$	4.409***	$-2.273^{'}$	-1.041	
		(0.477)	(0.114)	(5.596)	(5.691)	(0.389)	(6.156)	(4.311)	
Above 760	967	-3.163***	-0.949***	-4.543***	-3.964***	4.469***	0.051	-10.434***	
		(0.062)	(0.046)	(0.126)	(0.184)	(0.143)	(0.216)	(0.235)	
Credit card not maxed out	1,411	-3.111***	-0.912***	-4.543***	-3.862***	4.359***	-0.072	-10.475***	
		(0.014)	(0.009)	(0.027)	(0.032)	(0.032)	(0.458)	(0.205)	
Credit card maxed out	243	1.354	-0.670***	-4.184**	-2.817***	4.703***	1.108	1.382	
Creari cara mazea out	210	(1.270)	(0.196)	(2.097)	(0.843)	(0.723)	(59.159)	(0.939)	
Has not used BNPL in past yea	r 1,028	-3.115***	-0.915***	-4.591***	-3.917***	4.366***	-0.081	-10.452***	
This not used bivi i in past yea	1 1,020	(0.042)	(0.025)	(0.030)	(0.064)	(0.078)	(0.301)	(0.276)	
Used BNPL in past year	432	1.853***	$-0.642^{***}$	-6.033***	$-4.651^{***}$	4.273***	33.370	(0.270) $-2.721$	
Coca bivi L ili past year	434	(0.682)	-0.042 $(0.093)$	-0.055 $(0.514)$	-4.631 $(0.432)$	(0.480)	(29.544)	(2.639)	

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Note: Group-level estimates of the WTP for a standard BNPL payment plan, computed as in equation (8) with  $\Delta=0$ , are shown in column 1. Columns 2 to 8 show group-level estimates of the WTP for alternative values of BNPL attributes ( $\Delta_j$  are defined as in column headers) as computed in equation (7). The choice model estimates come from a model where price of the good/service being larger than \$600 is interacted with all of the BNPL attributes, including the fixed costs. Block-bootstrapped standard errors at the individual level are also clustered at the individual level and included in parentheses. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

**TABLE A5:** Probabilistic Choice Model Estimates - Excluding respondents without individual-level estimates

	(1)	(2)
Log Total Price	$-30.980^{***}$ $(3.522)$	$ \begin{array}{c} -32.291^{***} \\ (3.883) \end{array} $
Number of weeks btw payments - 2	0.194*** (0.026)	0.200*** (0.028)
Payment reported to CB	$-0.186^{***}$ (0.034)	
Payment reported to CB (Wave 1)		$-0.916^{***}$ (0.115)
Payment reported to CB (Wave 2 & 3)		$-0.196^{***}$ (0.038)
App approval required	$-1.193^{***}$ (0.156)	$-1.252^{***}$ (0.157)
Pay option charges interest	$-5.487^{***}$ (0.333)	$-5.344^{***}$ $(0.355)$
Abs value of $\frac{FP}{TP} - 0.25$ (if positive)	$-1.339^{***}$ (0.152)	$-1.390^{***}$ (0.171)
Abs value of $\frac{FP}{TP} - 0.25$ (if negative)	$-4.027^{***}$ (0.734)	$-4.225^{***}$ (0.800)
BNPL	$-1.209^{***}$ (0.137)	$-1.260^{***}$ (0.151)
Observations	65,408	65,408
Individuals Individual-Scenarios	1,314 32,704	1,314 32,704

Note: Bootstrapped standard errors are clustered at the individual level. The estimated models also include dummies for second and third waves and a dummy to capture any systematic rank-order effects in the probability assigned to alternative 3 versus alternative 2 that is unrelated to the specific scenarios shown. \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

**TABLE A6:** Estimated Group-level WTPs for standard BNPL and for BNPL Attributes Over Standard BNPL (as share of total price) - Excluding respondents without individual-level estimates

			WTP to move from a Standard BNPL to a BNPL plan with						
R	espondents	(1) Standard BNPL	(2) 40% First Payment	(3) 15% First Payment	(4) Credit Reporting	(5) Four Week Pay Period	(6) Approval Required	(7) Charges Interest	
All	1,314	-3.827***	-0.646*** (0.026)	-1.931***	-0.599***	1.261***	-3.777*** (0.17c)	-16.233**	
Female	664	(0.079) $-4.019***$	(0.026) $-0.704***$	(0.255) $-1.783***$	(0.074) $-0.433$	(0.102) 1.193***	(0.176) $-3.713***$	(2.385) $-23.173**$	
Male	649	(0.265) $-3.827***$	$(0.070) \\ -0.389***$	(0.602) $-1.885***$	(0.288) $-0.573***$	(0.185) $1.313***$	$(0.318) \\ -3.677***$	(3.340) $-6.848**$	
White	1,093	(0.131) $-3.827***$	$(0.098) \\ -0.646***$	(0.262) $-1.931***$	$(0.079) \\ -0.599***$	(0.146) $1.261***$	(0.232) $-3.777***$	(3.231) $-10.896**$	
Black	144	(0.048) $-3.827***$	$(0.091) \\ -0.659$	(0.265) $1.304$	$(0.048) \\ -0.562$	(0.088) $1.336*$	(0.154) $-3.635***$	(2.706) $-6.290$	
Asian	74	(1.249) $-3.057**$	$(0.457) \\ -0.389*$	$(1.713) \\ -1.748*$	$(0.969) \\ -0.644*$	(0.699) $1.169**$	(1.320) $-3.521***$	(5.055) $-6.860$	
Hispanic	129	(1.206) $-3.198**$	(0.227) $-0.646***$	$(1.002) \\ -0.274$	$(0.346) \\ -0.599$	(0.503) $1.261*$	$(0.740) \\ -3.777**$	(7.243) $-7.306$	
18 to 39	465	(1.443) -3.827***	(0.203) $-0.563***$	(1.248) -2.351***	(0.516) -0.836***	(0.684) 0.779***	(1.586) -4.691***	(7.333) -13.872**	
40 to 59	555	(0.160) $-3.827***$	(0.062) $-0.655***$	(0.370) $-0.389$	(0.231) $-0.575***$	(0.264) 1.309***	(0.498) $-3.685****$	(3.780) -19.055**	
		(0.228)	(0.055)	(0.921)	(0.198)	(0.154)	(0.253)	(2.951)	
60 and older	278	-4.054*** (0.332)	$-0.611^{***}$ $(0.081)$	$-1.372^{***}$ (0.206)	$-0.221^*$ (0.134)	1.552*** (0.284)	$-2.491^{***}$ (0.318)	-13.021* (5.773)	
College	784	-3.827*** $(0.084)$	$-0.341^{***}$ $(0.044)$	-1.827*** (0.396)	-0.657*** $(0.083)$	$1.142^{***}$ $(0.154)$	-3.664*** $(0.142)$	-7.227* (2.604)	
No College	530	-3.898*** $(0.248)$	$-0.739^{***}$ $(0.069)$	-1.591*** $(0.439)$	$-0.334^*$ (0.199)	1.651*** (0.266)	$-2.963^{***}$ $(0.344)$	$-6.050^*$ $(2.150)$	
< 50k	355	$-2.210^*$ $(1.257)$	$-0.787^{***}$ $(0.117)$	-1.216 $(0.812)$	-0.197 $(0.278)$	2.081*** (0.408)	$-2.212^{***}$ $(0.712)$	$-6.822^*$ $(2.147)$	
50k-75k	273	-3.675*** $(0.733)$	-0.628***	-1.139 $(0.933)$	$-0.651^*$ (0.356)	1.154***	-3.981***	$-25.902^{*}$	
75k-150k	487	-3.882***	(0.115) -0.389***	$-1.596^{**}$	-0.684***	(0.362) 0.973***	(0.687) $-3.882***$	$(6.625)$ $-14.087^*$	
> 150k	293	(0.250) $-5.766***$	$(0.110) \\ -0.579***$	(0.682) $-1.461***$	$(0.205) \\ -0.267$	(0.258) 1.800***	(0.344) $-2.684***$	(3.762) $-1.995*$	
Below 720	394	$(1.130) \\ -0.036$	(0.154) $-0.868***$	$(0.205) \\ 0.000$	$(0.192) \\ 0.036$	(0.324) $2.557***$	(0.404) $-4.994***$	$(0.798) \\ -8.087*$	
720-760	261	(0.979) $-3.918***$	(0.211) $-0.658***$	(1.361) $-2.037***$	$(0.500) \\ -0.565$	(0.738) $1.139***$	(1.692) $-3.918***$	$(3.893)$ $-19.027^*$	
Above 760	702	(0.587) $-4.112***$	(0.102) $-0.389***$	$(0.397) \\ -1.579***$	(0.351) $-0.328***$	(0.321) $1.211***$	$(0.536) \\ -2.937***$	(4.262) $-3.155*$	
Credit card not maxed out	1,038	(0.129) $-3.855***$	$(0.057) \\ -0.389***$	(0.091) $-1.748***$	$(0.098) \\ -0.631***$	(0.063) $1.138***$	(0.158) $-3.508***$	(0.193) $-3.746*$	
Credit card maxed out	194	(0.127) $2.280**$	$(0.015) \\ -0.788***$	(0.040) $3.215$	$(0.105) \\ -0.192$	(0.152) $2.091***$	(0.115) $-3.788***$	(1.346) $-5.207*$	
Has not used BNPL in past ye		(0.921) $-4.191***$	(0.231) -0.389***	(2.682) $-1.748***$	(0.843) $-0.513***$	$(0.660) \\ 0.671**$	(1.257) $-3.394***$	$(2.345)$ $-3.734^*$	
Used BNPL in past year	343	(0.517) 1.745***	$(0.036) \\ -0.605***$	$(0.129) \\ -0.605$	(0.189) $-0.716**$	(0.271) 1.023***	(0.254) $-4.229***$	(1.233) $-15.377$	
1 ,		(0.524)	(0.071)	(0.879)	(0.292)	(0.347)	(0.638)	(10.541)	

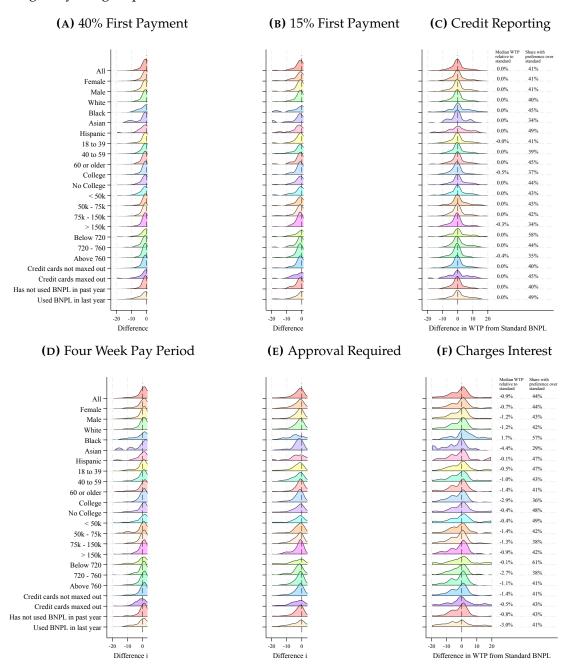
Note: Group-level estimates of the WTP for a standard BNPL payment plan, computed as in equation (8) with  $\Delta=0$ , are shown in column 1. Columns 2 to 8 show group-level estimates of the WTP for alternative values of BNPL attributes ( $\Delta_j$  are defined as in column headers) as computed in equation (7). \* p<0.1, \*\* p<0.05, \*\*\* p<0.01.

TABLE A7: Median Individual Level WTP for Given BNPL Plans by Demographic Group

	WTP to move from a Standard BNPL to a BNPL plan with							
	Obs	Standard BNPL	40% First Payment	15% First Payment	Credit Reporting	Four Week Pay Period	Approval Required	Charges Interest
All	1,314	-4.5 [-10.5, 2.3]	-0.8 [-2.2, 1.5]	-0.1 [-3.1, 6.4]	0.0 [-3.0, 3.2]	0.6 [-1.8, 3.2]	-1.2 [-6.0, 2.6]	-0.9 [-9.8, 3.0]
Female	664	-4.6 [-10.7, 3.4]	-0.6 [-2.0, 2.3]	-0.4 [-5.1, 6.5]	0.0 [-4.3, 3.3]	0.8 [-1.9, 3.6]	-1.1 [-6.3, 3.9]	-0.7 [-10.7, 3.3]
Male	649	-4.5 [-9.6, 1.5]	-0.9 [-2.3, 1.0]	0.0 [-2.5, 6.1]	0.0 [-2.8, 2.9]	0.6 [-1.7, 2.8]	-1.4 [-5.6, 1.7]	-1.2 [-9.1, 2.7]
White	1,093	-4.7 [-9.9, 2.0]	-0.8 [-2.0, 1.2]	-0.3 [-2.8, 5.9]	0.0 [-3.0, 2.3]	0.6 [-1.6, 3.1]	-1.3 [-5.8, 1.7]	-1.2 [-10.0, 2.5]
Black	144	-4.7 [-17.0, 4.5]	0.2 [-3.6, 3.5]	0.1 [-7.9, 10.0]	0.0 [-4.8, 7.1]	0.6 [-5.3, 4.8]	-1.2 [-8.1, 8.5]	1.7 [-6.7, 8.0]
Asian	74	-4.1 [-13.9, 1.0]	[-3.6, 3.3] -1.0 [-3.9, 1.2]	[-7.9, 10.0] 0.0 [-2.7, 14.2]	0.0 [-3.2, 2.3]	[-3.3, 4.6] 0.4 [-6.8, 3.2]	-1.5	[-6.7, 6.0] -4.4 [-18.7, 0.8]
Hispanic	129	-4.4	-0.7	-1.2	0.0	0.6	[-4.4, 1.6] -0.4	-0.1
18 to 39	465	[-9.6, 2.2] -4.4	[-3.8, 3.7] -0.5	[-6.1, 5.7] -0.3	[-5.0, 7.8] -0.0	[-2.7, 6.2]	[-5.8, 8.7] -1.5	[-7.0, 5.8] -0.5
40 to 59	555	[-10.5, 2.3] -4.1	[-2.0, 2.3] -0.5	[-4.2, 5.4]	[-4.4, 2.7]	[-3.0, 2.9] 0.7	[-7.0, 5.9] -1.5	[-9.7, 4.7] -1.0
60 and older	278	[-10.5, 2.4] -4.8	[-2.3, 1.9] -1.0	[-3.5, 7.2] -0.1	[-3.6, 3.3]	[-1.6, 3.3] 1.3	[-7.2, 2.6] -0.8	[-9.0, 3.3] -1.4
College	784	[-10.5, 2.1] -4.9	[-2.2, 0.6] -0.9	[-2.4, 6.2] -0.5	[-2.4, 3.5] -0.5	[-1.6, 3.4] 0.7	[-4.2, 2.0] -1.7	[-10.5, 2.3] -2.9
No College	530	[-10.4, 0.6] -3.8	[-1.9, 0.5] -0.7	[-2.6, 4.5] 0.0	[-3.3, 1.4] 0.0	[-1.1, 2.7] 0.6	[-5.8, 0.3] -0.7	[-11.7, 1.6] -0.4
< 50k	337	[-10.5, 3.7] -2.0	[-2.4, 2.6] -0.6	[-4.1, 8.1] 0.0	[-2.9, 5.1] 0.0	[-2.8, 3.6] 0.9	[-6.1, 6.2] -0.5	[-8.9, 4.7] -0.4
50k-75k	249	[-10.7, 5.1] -5.0	[-2.9, 3.5] -0.6	[-4.3, 8.2] -0.3	[-3.3, 5.6] 0.0	[-4.1, 4.3] 0.6	[-6.7, 9.6] -1.5	[-10.7, 5.0] -1.4
75k-150k	444	[-12.7, 2.0] -4.9	[-1.9, 1.7] -0.9	[-4.6, 7.0] -0.0	[-2.7, 3.8] 0.0	[-1.8, 3.1] 0.7	[-6.1, 1.1] -1.5	[-9.6, 3.0] -1.3
> 150k	279	[-9.4, 0.9] -5.6	[-1.8, 0.7] -0.9	[-2.7, 5.7] -0.8	[-3.2, 1.9] -0.3	[-1.0, 2.8] 0.6	[-5.5, 0.8] -1.2	[-9.3, 2.0] -0.9
Below 720	370	[-10.8, 0.1] -2.2	[-2.0, 0.3] 0.0	[-2.4, 2.8] 0.9	[-3.2, 1.0] 0.0	[-1.0, 2.7] 0.5	[-4.7, 0.4] -0.7	[-8.9, 2.3] -0.1
720-760	214	[-13.1, 8.9] -4.9	[-2.7, 3.8] -0.9	[-5.1, 10.2] 0.0	[-4.5, 8.8] 0.0	[-4.2, 5.6] 0.6	[-10.5, 9.1] -1.5	[-9.6, 9.1] -2.7
Above 760	660	[-10.5, 2.2] -5.3	[-2.2, 1.0] -0.9	[-2.4, 8.7] -0.9	[-2.6, 4.4] -0.4	[-1.0, 2.8] 0.8	[-5.6, 1.4] -1.3	[-12.8, 2.3] -1.1
CC not maxed out	1,010	[-9.6, 0.0] -5.3	[-1.8, 0.1] -0.9	[-2.8, 2.7] -0.4	[-2.9, 0.9] 0.0	[-1.0, 2.7] 0.8	[-4.7, 0.6] -1.2	[-8.9, 2.1] -1.4
CC maxed out	179	[-10.0, 0.4] 0.3	[-2.0, 0.8] -0.2	[-2.7, 4.8] 1.4	[-2.8, 2.1] 0.0	[-1.0, 2.9] 0.0	[-5.0, 1.2] -1.6	[-9.6, 2.3] -0.5
Not used BNPL last year	684	[-10.5, 9.4] -5.6	[-3.6, 2.5] -0.8	[-5.1, 11.4] -0.4	[-5.5, 7.6] 0.0	[-3.6, 5.3] 0.6	[-9.5, 6.6] -1.4	[-10.8, 6.7] -0.8
Used BNPL last year	306	[-10.8, 0.0] -0.7	[-1.7, 1.0] -0.4	[-2.9, 5.3] 0.9	[-3.0, 2.1] 0.0	[-1.1, 2.8] 0.3	[-5.4, 1.2] -1.0	[-8.4, 2.3] -3.0
,		[-9.1, 8.9]	[-3.7, 3.6]	[-4.1, 9.8]	[-3.0, 6.4]	[-3.5, 5.3]	[-9.4, 5.9]	[-14.8, 7.1]

Note: Table reports median WTP for a standard BNPL plan, and various BNPL plans with adjusted attributes. WTP is reported as a share of the total purchase price. Interquartile range in brackets.

**FIGURE A2:** Difference in Individual WTP Between Standard BNPL and Attribute Changes, by Subgroup



**Note:** Each subplot shows the distribution of the difference between individual-level estimates of the willingness to pay for the Standard BNPL bundle and a change in attribute from the standard bundle for a different subgroup, as computed in equation (7). The blue bars show the 25th and 75th percentiles and the black line within the bar denotes the median difference in WTP for each group.

## Appendix B Survey instrument

Our data were collected in January 2024, May 2024 and September 2024 using supplemental questions to the Survey of Consumer Expectations. The SCE core questionnaire can be found here. Some supplemental questions were included as part of this survey wave.

## Supplemental questions in Experiment - January 2024

**QEx20.** We will next describe a set of different events or circumstances and would like you to think of how these may affect your decision to use a Buy-Now-Pay-Later payment option when making a new purchase sometime over the next month.

Remember that "Buy-Now-Pay-Later" is a payment option, whereby customers do not pay for the full price at the time of purchase, but rather pay in several installments. (These payment plans are often offered through companies such as Affirm, Afterpay, and Klarna.)

[Randomize into 4 groups with group 1 answering Cases 1,2,4,5, group 2 answering Cases 1,3,4,6, group 3 answering Cases 2,3,4,5, and group 2 answering Cases 2,3,5,6.]

Case 1. Suppose that sometime over the next month you decide to buy a new appliance such as a space heater or microwave oven costing \$200. When checking out, you are offered the option to pay for the item in four installments spread out over a period of time, with the first payment due immediately. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- A discount associated with using the payment plan
- The time between payments (determining whether you can repay over a short or longer period)
- Whether application approval is required (where your credit report is pulled). Approval requires you to provide a few details about yourself to be able to do the credit check. You will be notified within a minute. If not approved you will be asked to pay the full purchase price at check out.

#### Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the first scenario below,

- with plan A you will need to pay \$200 at checkout without any installments or application approval required.
- with plan B, you will get a discount of 15%, which means that you will pay \$170 in total. You will pay this amount in 4 installments (\$42.5 each) with payments being 2 weeks apart. This plan also doesn't require any application approval (credit checks).
- plan C offers a discount of 10%, so you will pay \$180 in total. You will make 4 payments (\$45 each) with payments being 3 weeks apart. This plan doesn't require any application approval either.

What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

#### Scenario 1

Payment Plan	nent Plan Discount offered and		Time between	Application approval		
	total	amount you pay	payments	required?		
A (no plan)	0%	\$200	Pay in full at purchase	No		
В	15%	\$170	2 weeks	No		
C	10%	\$180	3 weeks	No		

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 2

Payment Plan	Discount offered and	Time between	Application approval
	total amount you pay	payments	required?
A (no plan)	0% \$200	Pay in full at purchase	No
В	0% \$200	1 month	Yes
C	5% \$190	2 weeks	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 3

Payment Plan	Discount offered and		Time between	Application approval
	total	amount you pay	payments	required?
A (no plan)	0%	\$200	Pay in full at purchase	No
В	5%	\$190	2 weeks	Yes
C	0%	\$200	2 weeks	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chanceB \_\_\_\_ percent chanceC \_\_\_\_ percent chance

#### Scenario 4

<b>Payment Plan</b>	Discount offered and	Time between	Application approval
	total amount you pay	payments	required?
A (no plan)	0% \$200	Pay in full at purchase	No
В	5% \$190	2 weeks	Yes
C	0% \$200	3 weeks	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chanceB \_\_\_\_ percent chanceC \_\_\_\_ percent chance

Case 2. Suppose [if group=1 [again]] that sometime over the next month you decide to buy a new appliance such as a space heater or microwave oven costing \$200. When checking out, you are offered the option to pay for the item in **four installments spread out over a period of time, with the first payment due immediately**. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

• A discount associated with using the payment plan

- The time between payments (determining whether you can repay over a short or longer period)
- Whether the payments are reported to the credit bureaus, which might have an impact on your credit score (positive if payments are made on time, negative if not)

#### Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the following scenario,

- with plan A you will need to pay \$200 at checkout without any installments and your payment will not be reported to the credit bureaus.
- with plan B, you will get a discount of 15%, which means that you will pay \$170 in total. You will pay this amount in 4 installments (\$42.5 each) with payments being 2 weeks apart. Your payments will not be reported to the credit bureaus.
- plan C offers a discount of 5%, so you will pay \$190 in total. You will make 4 payments (\$47.5 each) with payments being 3 weeks apart. In this plan, your payments will be reported to the credit bureaus.

#### What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

#### Scenario 1

<b>Payment Plan</b>	Disco	unt offered and	Time between	Payment reported to
	total a	amount you pay	payments	credit bureaus?
A (no plan)	0%	\$200	Pay in full at purchase	No
В	15%	\$170	2 weeks	No
C	5%	\$190	3 weeks	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 2

<b>Payment Plan</b>	Discount offered and		Time between	Payment reported to
	total a	amount you pay	payments	credit bureaus?
A (no plan)	0%	\$200	Pay in full at purchase	No
В	15%	\$170	2 weeks	Yes
C	5%	\$190	3 weeks	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chanceB \_\_\_\_ percent chanceC \_\_\_\_ percent chance

#### Scenario 3

Payment Plan	Discount offered and		Time between	Payment reported to
	total amo	ount you pay	payments	credit bureaus?
A (no plan)	0% \$20	00	Pay in full at purchase	No
В	5% \$19	90	2 weeks	No
C	0% \$20	00	1 week	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chanceB \_\_\_\_ percent chanceC \_\_\_\_ percent chance

#### Scenario 4

Payment Plan	Discount offered and	Time between	Payment reported to
	total amount you pay	payments	credit bureaus?
A (no plan)	0% \$200	Pay in full at purchase	No
В	5% \$190	2 weeks	Yes
C	0% \$200	1 month	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chanceB \_\_\_\_ percent chanceC \_\_\_\_ percent chance

Case 3. Suppose now that sometime over the next month you find yourself with a need to get an unexpected medical procedure or dental work done, not covered by your insurance. When checking out, you are offered the option to pay for the item in **four installments spread out over a period of time, with the first payment due immediately**. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- The cost of the procedure
- A discount associated with using the payment plan
- The time between payments (determining whether you can repay over a short or longer period)

Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

#### In the first scenario below,

- with plan A the cost will be \$200 without any installments or discount.
- plan B costs \$200, but you will get a discount of 5%, which means that you will pay \$190 in total. You will pay this amount in 4 installments (\$47.50 each) with payments being 2 weeks apart.
- plan C costs \$200 and offers no discount, so you will pay \$200 in total. You will make 4 payments (\$50.00 each) with payments being 3 weeks apart.

#### What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

#### Scenario 1

Payment Plan	Cost of the procedure	Discount offered and total amount you pay	Time between payments
A (no plan)	\$200	0% \$200	Pay in full at purchase
В	\$200	5% \$190	2 weeks
C	\$200	0% \$200	3 weeks

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_ percent chance

#### Scenario 2

<b>Payment Plan</b>	Cost of the procedure	Discount offered and	Time between payments
		total amount you pay	
A (no plan)	\$1,000	0% \$1,000	Pay in full at purchase
В	\$1,000	5% \$950	2 weeks
C	\$1,000	0% \$1,000	1 month

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 3

Payment Plan	Cost of the procedure	Discount offered and total amount you pay	Time between payments
A (no plan)	\$600	0% \$600	Pay in full at purchase
В	\$600	5% \$570	2 weeks
C	\$600	0% \$600	3 week

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_ percent chance

#### Scenario 4

Payment Plan	Cost of the procedure	Discount offered and total amount you pay	Time between payments
A (no plan)	\$600	0% \$600	Pay in full at purchase
В	\$600	5% \$570	2 weeks
C	\$600	0% \$600	1 month

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A	percent chance
В	percent chance
C	percent chance

Case 4. Suppose now [if Group=2 or 3 [again]] that sometime over the next month you find yourself with a need to get an unexpected medical procedure or dental work done, not covered by your insurance. When checking out, you are offered the option to pay for the item in **four installments spread out over a period of time, with the first payment due immediately**. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- The cost of the procedure
- The interest rate charged on the four payments
- The time between payments (determining whether you can repay over a short or longer period)

Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the first scenario below,

- with plan A you will need to pay \$600 at checkout without any interest or installments.
- Plan B charges no interest, which means that you will pay \$600 in total. You will pay this amount in 4 installments (\$150.00 each) with payments being 2 weeks apart.
- Plan C charges an interest rate (APR) of 24%, so you will pay \$630 in total. You will make 4 payments (\$157.50 each) with payments being 1 month apart.

What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

#### Scenario 1

Payment Plan	Cost of the procedure	Interest rate (APR) and total amount you	Time between payments
		pay	
A (no plan)	\$600	0% \$600	Pay in full at purchase
В	\$600	0% \$600	2 weeks
C	\$600	24% \$630	1 month

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 2

Payment Plan	Cost of the procedure	Interest rate (APR) and total amount you	Time between payments
		pay	
A (no plan)	\$200	0% \$200	Pay in full at purchase
В	\$200	0% \$200	2 weeks
C	\$200	24% \$210	1 month

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 3

Payment Plan	Cost of the procedure	Interest rate (APR) and total amount you	Time between payments
		pay	
A (no plan)	\$1,000	0% \$1,000	Pay in full at purchase
В	\$1,000	29% \$1,030	2 weeks
C	\$1,000	38% \$1,080	1 month

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance C \_\_\_\_ percent chance

#### Scenario 4

Payment Plan	Cost of the procedure	Interest rate (APR) and total amount you	Time between payments
A (no plan)	\$75	<b>pay</b> 0% \$75	Pay in full at purchase
В	\$75	39% \$78	2 weeks
C	\$75	32% \$80	1 month

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance B \_\_\_\_ percent chance

C \_\_\_ percent chance

Case 5. Suppose now that sometime over the next month you find yourself with a need to make unexpected car or home repairs costing \$400. When checking out, you are offered the option to pay for the item in four installments spread out over a period of time, with the first payment due immediately. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- The interest rate charged on the installment payments
- The amount of the first versus the next three payments
- Whether application approval is required (where your credit report is pulled). Approval requires you to provide a few details about yourself to be able to do the credit check. You will be notified within a minute. If not approved you will be asked to pay the full purchase price at check out.

Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the first scenario below,

- with plan A you will need to pay \$400 at checkout without any interest, installments or application approval.
- plan B charges no interest, which means that you will pay \$400 in total. You will pay \$160 right away and make 3 additional payments of \$80 each. This plan does not require an application approval (credit check).
- plan C charges no interest, so you will pay \$400 in total. You will pay \$100 right away and make 3 additional payments of \$100 each. This plan does not require an application approval (credit check).

What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

#### Scenario 1

Payment Plan		rest rate (APR) total amount you	purch subse	l payment at ase and ${f q}$ uent payments ${f d}$	Application approval required?
A (no plan)	0%	\$400	\$400	\$0	No
В	0%	\$400	\$160	\$80	No
C	0%	\$400	\$100	\$100	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_ percent chance

#### Scenario 2

Payment Plan	Interest rate (APR) and total amount you pay		Initial payment at purchase and subsequent payments: $1^{st}$ and $2^{nd}$ - $4^{th}$		Application approval required?
A (no plan)	0% \$40	00	\$400	\$0	No
В	0% \$40	00	\$250	\$50	No
C	0% \$40	00	\$100	\$100	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 3

Payment Plan		est rate (APR) otal amount you	purch subse	l payment at ase and quent paymen d $2^{nd}$ - $4^{th}$	Application approval required?
A (no plan)	0%	\$400	\$400	\$0	No
В	0%	\$400	\$160	\$80	Yes
C	24%	\$410	\$50	\$120	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 4

Payment Plan		est rate (APR) otal amount you	Initial payment at purchase and subsequent payments: $1^{st}$ and $2^{nd}$ - $4^{th}$		Application approval required?
A (no plan)	0%	\$400	\$400	\$0	No
В	0%	\$400	\$160	\$80	Yes
C	48%	\$420	\$105	\$105	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

Case 6. Suppose now [if Group=4 [again]] that sometime over the next month you find yourself with a need to make unexpected car or home repairs costing \$400. When checking out you are offered the option to pay for the item in four installments spread out over a period of time, with the first payment due immediately. The installment payments will be made automatically from a

bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- The interest rate charged on the installment payments
- The amount of the first versus the next three payments
- Whether the payments are reported to the credit bureaus, which might have an impact on your credit score (positive if payments are made on time, negative if not)

#### Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the first scenario below,

- with plan A you will need to pay \$400 at checkout without any interest or installments and the payment will not be reported to the credit bureaus.
- plan B charges no interest, which means that you will pay \$400 in total. You will pay this amount in 4 installments, with an initial payment of \$220 and subsequent 3 payments of \$60 each. Your payments will not be reported to the credit bureaus.
- plan C charges an interest rate (APR) of 47%, so you will pay \$440 in total. You will make 4 payments, \$110 each, and your payments will not be reported to the credit bureaus.

#### What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

#### Scenario 1

Payment Plan	ent Plan Interest rate (APR) and total amount you pay		purch subse	payment at ase and quent payments: $d \ 2^{nd} - 4^{th}$	Payment reported to credit bureaus?
A (no plan)	0%	\$400	\$400	\$0	No
В	0%	\$400	\$220	\$60	No
C	47%	\$440	\$110	\$110	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 2

•		est rate (APR) otal amount you	purch subse	l payment at ase and quent payments: d $2^{nd}$ - $4^{th}$	Payment reported to credit bureaus?
A (no plan)	0%	\$400	\$400	\$0	No
В	0%	\$400	\$220	\$60	No
С	47%	\$440	\$110	\$110	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 3

Payment Plan		est rate (APR) otal amount you	purch subse	payment at ase and quent payments $2^{nd}$ - $4^{th}$	Payment reported to credit bureaus?
A (no plan)	0%	\$400	\$400	\$0	No
В	24%	\$420	\$165	\$85	Yes
C	47%	\$440	\$110	\$110	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 4

Payment Plan		est rate (APR) otal amount you	purch subse	payment at ase and quent payments: $1  2^{nd} - 4^{th}$	Payment reported to credit bureaus?
A (no plan)	0%	\$400	\$400	\$0	No
В	0%	\$400	\$160	\$80	Yes
C	0%	\$400	\$100	\$100	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chanceB \_\_\_\_ percent chanceC \_\_\_\_ percent chance

## Supplemental questions in Experiment - May and September 2024

**QEx20.** We will next describe a set of different events or circumstances and would like you to think of how these may affect your decision to use a **Buy-Now-Pay-Later** payment option when making a new purchase sometime over the next month.

Remember that "Buy-Now-Pay-Later" is a payment option, whereby customers do not pay for the full price at the time of purchase, but rather pay in several installments. (These payment plans are often offered through companies such as Affirm, Afterpay, and Klarna.)

[Randomize into 4 groups with group 1 answering Cases 1,2,4,5, group 2 answering Cases 1,3,4,6, group 3 answering Cases 2,3,4,5, and group 2 answering Cases 2,3,5,6.]

Case 1. Suppose that sometime over the next month you decide to buy a new appliance such as a space heater or microwave oven costing \$200. When checking out, you are offered the option to pay for the item in four installments spread out over a period of time, with the first payment due immediately. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- A discount associated with using or not using the payment plan
- The time between payments (determining whether you can repay over a short or longer period)

• Whether application approval is required (where your credit report is pulled). Approval requires you to provide a few details about yourself to be able to do the credit check. You will be notified within a minute. If not approved you will be asked to pay the full purchase price at check out.

## Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the first scenario below,

- with plan A you will need to pay \$200 at checkout without any installments or application approval required.
- with plan B, you will get a discount of 10%, which means that you will pay \$180 in total. You will pay this amount in 4 installments (\$45 each) with payments being 4 weeks apart. This plan also doesn't require any application approval (credit checks).
- plan C offers a discount of 15%, so you will pay \$170 in total. You will make 4 payments (\$42.5 each) with payments being 2 weeks apart. This plan doesn't require any application approval either.

# What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

#### Scenario 1

Payment Plan	Disco	ount offered and	Time between	Application approval
	total	amount you pay	payments	required?
A (no plan)	0%	\$200	Pay in full at purchase	No
В	10%	\$180	4 weeks	No
C	15%	\$170	2 weeks	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chanceB \_\_\_\_ percent chanceC \_\_\_\_ percent chance

<b>Payment Plan</b>	Discount offered and	Time between	Application approval
	total amount you pay	payments	required?
A (no plan)	5% \$190	Pay in full at purchase	No
В	0% \$200	4 weeks	Yes
C	5% \$190	2 weeks	No

A \_\_\_\_ percent chance
B \_\_\_\_ percent chance
C \_\_\_\_ percent chance

#### Scenario 3

Payment Plan	Disco	ount offered and	Time between	Application approval
	total	amount you pay	payments	required?
A (no plan)	10%	\$180	Pay in full at purchase	No
В	0%	\$200	6 weeks	No
C	5%	\$190	3 weeks	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance
B \_\_\_\_ percent chance
C \_\_\_\_ percent chance

## Scenario 4

Payment Plan	Discount offered and	Time between	Application approval
	total amount you pay	payments	required?
A (no plan)	0% \$200	Pay in full at purchase	No
В	10% \$180	4 weeks	Yes
C	5% \$190	8 weeks	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chanceB \_\_\_\_ percent chanceC \_\_\_\_ percent chance

Case 2. Suppose [if group=1 [again]] that sometime over the next month you decide to buy a new appliance such as a space heater or microwave oven costing \$200. When checking out, you are offered the option to pay for the item in four installments spread out over a period of time, with the first payment due immediately. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- A fee associated with using or not using the payment plan
- The time between payments (determining whether you can repay over a short or longer period)
- Whether on-time payments are reported to the credit bureaus, which might affect your credit score

# Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the following scenario,

- with plan A you will need to pay \$200 at checkout without any installments and your payment will not be reported to the credit bureaus.
- with plan B, you are charged a fee of 5%, which means that you will pay \$210 in total. You will pay this amount in 4 installments (\$52.5 each) with payments being 2 weeks apart. Your on-time payments will not be reported to the credit bureaus.
- plan C charges a fee of 5%, so you will pay \$210 in total. You will make 4 payments (\$52.5 each) with payments being 2 weeks apart. In this plan, your on-time payments will be reported to the credit bureaus.

## What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

Payment Plan	Fee charged and total amount you pay	Time between payments	On-time payments reported to credit bureaus?
A (no plan)	0% \$200	Pay in full at purchase	No
В	5% \$210	2 weeks	No
C	5% \$210	2 weeks	Yes

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 2

Payment Plan	Fee charged and total amount you pay	Time between payments	On-time payments reported to credit bureaus?
A (no plan)	5% \$210	Pay in full at purchase	No
В	5% \$210	2 weeks	Yes
C	0% \$200	4 weeks	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

## Scenario 3

Payment Plan	Fee charged and total amount you pay	Time between payments	On-time payments reported to credit bureaus?
A (no plan)	10% \$220	Pay in full at purchase	No
В	0% \$200	4 weeks	No
C	0% \$200	8 weeks	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

## Scenario 4

Payment Plan	Fee charged and total amount you pay	Time between payments	On-time payments reported to credit bureaus?
A (no plan)	0% \$200	Pay in full at purchase	No
В	5% \$210	2 weeks	Yes
C	0% \$200	1 week	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_ percent chance

Case 3. Suppose now that sometime over the next month you find yourself with a need to get an unexpected medical procedure or dental work done, not covered by your insurance. When checking out, you are offered the option to pay for the item in **four installments spread out over a period of time, with the first payment due immediately**. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- The cost of the procedure
- A discount associated with using the payment plan
- The time between payments (determining whether you can repay over a short or longer period)

Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the first scenario below,

- with plan A the cost will be \$500 without any installments or discount.
- plan B costs \$500, but you will get a discount of 10%, which means that you will pay \$450 in total. You will pay this amount in 4 installments (\$112.50 each) with payments being 2 weeks apart.
- plan C costs \$500 and offers no discount, so you will pay \$500 in total. You will make 4 payments (\$125.00 each)with payments being 3 weeks apart.

# What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

#### Scenario 1

Payment Plan	Cost of the procedure	Discount offered and total amount you pay	Time between payments
A (no plan)	\$500	0% \$500	Pay in full at purchase
В	\$500	10% \$450	2 weeks
C	\$500	0% \$500	3 weeks

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 2

Payment Plan	Cost of the procedure	Discount offered and total amount you pay	Time between payments
A (no plan)	\$2,000	0% \$2,000	Pay in full at purchase
В	\$2,000	15% \$1,700	2 weeks
C	\$2,000	10% \$1,800	4 weeks

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

Payment Plan	Cost of the procedure	Discount offered and total amount you pay	Time between payments
A (no plan)	\$1,200	0% \$1,200	Pay in full at purchase
В	\$1,200	5% \$1,140	1 week
C	\$1,200	15% \$1,020	3 weeks

A \_\_\_\_ percent chanceB \_\_\_\_ percent chanceC \_\_\_\_ percent chance

## Scenario 4

Payment Plan	Cost of the procedure	Discount offered a total amount you p	1 3
A (no plan)	\$1,100	10% \$990	Pay in full at purchase
В	\$1,100	5% \$1,045	4 weeks
C	\$1,100	15% \$935	2 weeks

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chanceB \_\_\_\_ percent chanceC \_\_\_\_ percent chance

Case 4. Suppose now [if Group=2 or 3 [again]] that sometime over the next month you find your-self with a need to get an unexpected medical procedure or dental work done, not covered by your insurance. When checking out, you are offered the option to pay for the item in **four installments spread out over a period of time, with the first payment due immediately**. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

• The cost of the procedure

- The interest rate charged on the four payments
- The time between payments (determining whether you can repay over a short or longer period)

## Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the first scenario below,

- with plan A you will need to pay \$600 at checkout without any interest or installments.
- Plan B charges no interest, which means that you will pay \$600 in total. You will pay this amount in 4 installments (\$150.00 each) with payments being 2 weeks apart.
- Plan C charges an interest rate (APR) of 27%, so you will pay \$620 in total. You will make 4 payments (\$155.00 each) with payments being 4 weeks apart.

What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

#### Scenario 1

Payment Plan	Cost of the procedure	Interest rate (APR) and total amount you	Time between payments
		pay	
A (no plan)	\$600	0% \$600	Pay in full at purchase
В	\$600	0% \$600	2 weeks
C	\$600	27% \$620	4 weeks

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

Payment Plan	Cost of the procedure	Interest rate (APR) and total amount you	Time between payments
		pay	
A (no plan)	\$80	0% \$80	Pay in full at purchase
В	\$80	40% \$84	4 weeks
C	\$80	0% \$80	1 week

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 3

Payment Plan	Cost of the procedure	Interest rate (APR) and total amount you	Time between payments
A (no plan)	\$2,000	<b>pay</b> 0% \$2,000	Pay in full at purchase
В	\$2,000	26% \$2,030	2 weeks
C	\$2,000	46% \$2,115	4 weeks

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_ percent chance

### Scenario 4

Payment Plan	Cost of the procedure	Interest rate (APR) and total amount you	Time between payments
A (ma mlam)	ΦΩΩ	pay	Danin full at munch as
A (no plan)	\$80	0% \$80	Pay in full at purchase
В	\$80	33% \$81	1 week
C	\$80	42% \$82	2 weeks

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

**Case 5.** Suppose now that sometime over the next month you find yourself with a need to make unexpected car or home repairs costing \$600. When checking out, you are offered the option to

pay for the item **in four installments spread out over a period of time, with the first payment due immediately**. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- The interest rate charged on the installment payments
- The amount of the first versus the next three payments
- Whether application approval is required (where your credit report is pulled). Approval requires you to provide a few details about yourself to be able to do the credit check. You will be notified within a minute. If not approved you will be asked to pay the full purchase price at check out.

## Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the first scenario below,

- with plan A you will need to pay \$600 at checkout without any interest, installments or application approval.
- plan B charges no interest, which means that you will pay \$600 in total. You will pay \$300 right away and make 3 additional payments of \$100 each. This plan does not require an application approval (credit check).
- plan C charges no interest, so you will pay \$600 in total. You will pay \$150 right away and make 3 additional payments of \$150 each. This plan does not require an application approval (credit check).

## What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

Payment Plan		rest rate (APR) total amount you	purcha subsec	payment at use and quent payments: $1$ $2^{nd}$ $-4^{th}$	Application approval required?
A (no plan)	0%	\$600	\$600	\$0	No
В	0%	\$600	\$300	\$100	No
C	0%	\$600	\$150	\$150	No

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_ percent chance

#### Scenario 2

Payment Plan		rest rate (APR) total amount you	Initial payment at purchase and subsequent payments: $1^{st}$ and $2^{nd}$ - $4^{th}$		Application approval required?
A (no plan)	0%	\$600	\$600	\$0	No
В	0%	\$600	\$0	\$200	No
C	0%	\$600	\$150	\$150	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

#### Scenario 3

Payment Plan		est rate (APR) otal amount you	purcha subseq	payment at use and uent payments: $2^{nd}-4^{th}$	Application approval required?
A (no plan)	0%	\$600	\$600	\$0	No
В	34%	\$610	\$220	\$130	Yes
C	0%	\$600	\$120	\$160	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

Payment Plan		est rate (APR) otal amount you	Initial payment at purchase and subsequent payments: $1^{st}$ and $2^{nd}$ - $4^{th}$		Application approval required?
A (no plan)	0%	\$600	\$600	\$0	No
В	34%	\$605	\$410	\$65	Yes
C	58%	\$620	\$155	\$155	Yes

A	percent chance
В	percent chance
C	percent chance

Case 6. Suppose now [if Group=4 [again]] that sometime over the next month you find yourself with a need to make unexpected car or home repairs costing \$1,000. When checking out you are offered the option to pay for the item in four installments spread out over a period of time, with the first payment due immediately. The installment payments will be made automatically from a bank account, or a debit, credit or prepaid card you own. In each of the scenarios below, you will be shown different payment plan options and you will be asked for the percent chance (or chances out of 100) of choosing each. The options also include the payment method you would have used to make the full payment if you had not been offered any of the payment plans.

In each of the 4 scenarios below, you will be shown different payment plan options where each is characterized by:

- The interest rate charged on the installment payments
- The amount of the first versus the next three payments
- Whether on-time payments are reported to the credit bureaus, which might affect your credit score

Suppose that the payment plan options are otherwise identical in all other aspects.

In each scenario, you are given a choice among three payment plans and you will be asked for the percent chance (or chances out of 100) of choosing each. Payment option A represents not choosing any of the payment plan options and paying the full amount now using your preferred payment method.

In the first scenario below,

- with plan A you will need to pay \$1,000 at checkout without any interest or installments and the payment will not be reported to the credit bureaus.
- plan B charges no interest, which means that you will pay \$1,000 in total. You will pay this amount in 4 installments, with an initial payment of \$700 and subsequent 3 payments of \$100 each. Your payments will not be reported to the credit bureaus.
- plan C charges an interest rate (APR) of 69%, so you will pay \$1,040 in total. You will make 4 payments, \$260 each, and your payments will not be reported to the credit bureaus.

# What is the percent chance that you choose each payment plan?

The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

#### Scenario 1

Payment Plan		est rate (APR) otal amount you	Initial payment at purchase and subsequent payments: $1^{st}$ and $2^{nd}$ - $4^{th}$		On-time payments reported to credit bureaus?
A (no plan)	0%	\$1,000	\$1,000	\$0	No
В	0%	\$1,000	\$700	\$100	No
C	59%	\$1,040	\$260	\$260	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_ percent chance

#### Scenario 2

Payment Plan		est rate (APR) otal amount you	purchas	ent payments:	On-time payments reported to credit bureaus?
A (no plan)	0%	\$1,000	\$1,000	\$0	No
В	69%	\$1,040	\$260	\$260	Yes
C	0%	\$1,000	\$100	\$300	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A \_\_\_\_ percent chance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance

# Scenario 3

Payment Plan	Payment Plan Interest rate (APR) and total amount you pay		Initial payment at purchase and subsequent payments: $1^{st}$ and $2^{nd}$ - $4^{th}$		On-time payments reported to credit bureaus?
A (no plan)	0%	\$1,000	\$1,000	\$0	No
В	69%	\$1,040	\$260	\$260	Yes
C	43%	\$1.030	\$100	\$310	No

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A	percent	chance
л	percent	CHarice

B \_\_\_\_ percent chance

C \_\_\_ percent chance

## Scenario 4

Payment Plan		rest rate (APR) total amount you	Initial payment at purchase and subsequent payments: $1^{st}$ and $2^{nd}$ - $4^{th}$		On-time payments reported to credit bureaus?
A (no plan)	0%	\$1,000	\$1,000	\$0	No
В	0%	\$1,000	\$400	\$200	Yes
C	0%	\$1,000	\$250	\$250	Yes

What is the percent chance that you choose each payment plan? The chance of each alternative should be a number between 0 and 100 and the chances given to the three alternatives should add up to 100.

A	percent	chance
$\boldsymbol{L}$	 percent	CHance

B \_\_\_\_ percent chance

C \_\_\_\_ percent chance