Behavioral Economics of Consumer Debt & Financial Decision Making

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I. INTRODUCTION

Credit card debt in the United States has reached levels not seen before. According to the Federal Reserve Bank of New York, balances passed \$1.14 trillion in 2023, even as interest rates climbed to their highest point in decades. At the same time, Buy Now, Pay Later (BNPL) products have become a common feature of everyday shopping. Surveys from the New York Fed show that more than 20 percent of adults used BNPL in the past year, and the practice is especially concentrated among households that already describe themselves as financially fragile. These two developments, rising balances on traditional credit cards and rapid growth in newer installment products, have become central to current debates about consumer finance.

The persistence of debt despite higher borrowing costs is not fully explained by income or prices alone. Research on consumer behavior shows that timing and presentation matter a great deal. In BNPL transactions, the separation between purchase and payment makes the expense feel lighter in the moment, encouraging shoppers to buy more than they otherwise would (Ashby et al., 2025; Kumar et al., 2024). Credit card studies draw the same conclusion: the minimum payment line, meant as information, in fact influences behavior by anchoring repayment at low levels (Guttman-Kenney et al.). Field experiment evidence indicates that subtle changes in reminders or framing can affect repayment choices in measurable directions. Taken together, these articles suggest that borrowing choices are as susceptible to psychological bias as credit constraint.

This paper brings those insights together by combining recent data on credit card debt, studies of BNPL adoption, and field evidence on repayment behavior. The focus will be on identifying the behavioral patterns that drive persistent indebtedness and on examining the tools that might improve outcomes. A case study of BNPL will serve as the central example, since its growth highlights both the appeal of flexible payment options and the risks they pose when paired with present-biased decision making. By drawing on large datasets, experimental evidence, and policy analysis from central banks and consumer researchers, the discussion will outline how design and regulation can play a role in supporting healthier borrowing patterns.

BEHAVIORAL PATTERNS BEHIND CONSUMER DEBT

Economists have long assumed that people borrow and repay based mainly on price and income. More recent work, though, suggests that this need not be the case. With BNPL, for example, the purchase and the payment are separated. Ashby and colleagues (2025) looked at millions of transactions and found that this gap between buying and paying pushes spending up. Kumar et al. (2024) put numbers on it: if BNPL is available, average spend goes up by about 6.4 percent. That kind of shift is hard to explain with income or interest rates alone; it reflects how people experience the timing of payment.

Credit cards show a similar story but through a different mechanism. The "minimum payment" line on a statement seems like neutral information, yet field studies by Guttman-Kenney show it quietly anchors repayment behavior. People who could pay more often match their payment to the minimum or only slightly above it, extending their balance for months or years. At the same time, total revolving credit reached its highest point on record in 2023, topping \$1.14 trillion according to the New York Fed. These two pieces, anchoring and rising balances, line up to show how design and psychology interact.

Trials that tried to shift repayment behavior back this way give the final clue. In randomized tests, simple tweaks such as changing the way payment options are displayed or sending a reminder just before the due date altered outcomes in measurable ways. These were not huge jumps at the individual level, but across thousands of borrowers they added up. The lesson is not that consumers are careless, but that small features in credit products can tilt decisions. Understanding those features is a necessary step if policy makers or lenders want to see healthier repayment patterns.

EMPIRICAL TRENDS IN DEBT AND BNPL USAGE

The past few years have produced striking numbers on household borrowing. The Federal Reserve Bank of New York reported that credit card debt rose to more than \$1.14 trillion in 2023, the highest ever. Meanwhile, delinquencies have begun rising again to pre-pandemic levels with the proportion of delinquent borrowers rising continually through 2024 (Liberty Street Economics, 2024). The above statistics identify that debt pressures are not limited to a select few but cut across all income brackets.

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Buy Now, Pay Later has grown on top of this already large base of revolving credit. Surveys conducted by the New York Fed show that roughly 20 percent of U.S. adults used BNPL in the prior year, and adoption is especially high among households that already describe themselves as "financially fragile." Among younger adults, the share using BNPL is even higher. The Kansas City Fed noted that the appeal lies in "convenience and flexibility," but the same reports also warn about repayment risk when installments overlap with other debts. Researchers have started to track the consequences of this growth in detail:

- **Spending effects:** Ashby et al. (2025) found that BNPL use raises transaction volumes by separating the point of purchase from the point of payment.
- **Measured impact:** Kumar et al. (2024) quantified a 6.42 percent increase in spending after BNPL adoption, a figure that cannot be explained by income growth alone.
- **Behavioral profiles:** Studies in Sweden show that BNPL often connects with materialism and impulsive buying, amplifying tendencies already present in certain consumer groups.
- **Hidden debt:** Business Insider warned that BNPL creates a kind of "phantom debt" because many obligations do not appear on traditional credit reports, making it harder for borrowers and lenders to see the full picture.

The data on credit cards offer a sobering parallel. Guttman-Kenney's experiments demonstrate that the way information is displayed on monthly statements, particularly the minimum payment line, affects repayment choices. Consumers often gravitate toward the anchor provided, even when they could pay more. Combined with record balances, this behavior explains why repayment lags capacity, leaving households with larger long-term interest costs.

Policymakers are taking notice. The Richmond Fed's 2025 brief described BNPL as a market innovation with "benefits and risks," noting its rapid growth and the frustrations it presents regulators who must balance innovation and consumer protection. Consumer Reports went further in its 2023 case study, arguing that BNPL highlights the need for stronger digital standards since most borrowers fail to properly compute the true cost of payments spread over time.

The pattern across these results is clear: debt is rising, and new products are changing how households borrow. But the reasons are not just economic. They are in psychology, design, and sometimes a lack of transparency.

Credit cards and BNPL together illustrate how borrowing today cannot be understood without looking closely at both data trends and behavioral influences.

Indicator	Value (Year)
U.S. Credit Card Debt	1.14 trillion (2023)
Share of Adults Using BNPL	20% (2024)
Spending Increase with BNPL Availability	+6.4%
Delinquency Trend	Rising back to pre-pandemic levels
BNPL Adoption in Sweden	Linked to impulsive buying, materialism

PSYCHOLOGICAL MECHANISMS SHAPING BORROWING

The numbers on credit card debt and BNPL usage are easy to list; understanding why they look the way they do is harder. Work published by the New York Fed and several academic teams shows that the timing and presentation of credit products play a big role in how people use them.

A clear example is present bias. To compound injury, moving payment in the future muted the temporary feeling of expense in the Ashby et al. 2025 analysis of millions of BNPL transactions. Kumar et al. (2024) measured the effect and found spending rose by about 6.4 percent once BNPL was offered. This is not a subtle change. It suggests that the structure of the product itself, not just prices, encourages larger purchases.

Credit cards have their own behavioral twist. The "minimum payment" box on statements looks like neutral information but acts more like a signal. Guttman-Kenney's field work shows that people who could afford higher payments often anchor on the minimum instead, stretching out their balances and paying more interest over time. Revolver balances had climbed to over \$1.14 trillion by late 2023, and these anchoring effects in part account for the reason.

Other patterns show up once you look for them. People keep mental "buckets" for money and may treat BNPL installments as separate from other debts, even though all draw from the same paycheck. A Swedish study found materialism and impulsive buying linked to heavier BNPL use. And across several data sets, borrowers underestimate how long repayment will take, a form of over-optimism that leaves them juggling overlapping obligations.

None of these tendencies are fixed. Randomized trials have shown that small changes, such as rewording repayment options or sending reminders, shift repayment behavior measurably. The changes are modest for any

one person but add up across thousands. What emerges is a picture of consumer credit shaped not only by interest rates and income, but by a set of predictable human habits interacting with the way credit is designed and marketed.

POLICY AND REGULATORY RESPONSES

Central banks and consumer groups have been watching the surge in household debt with growing unease. In a 2025 brief, the Richmond Fed called Buy Now, Pay Later a "fast-growing market innovation" and at the same time warned about repayment risk when obligations pile up out of view. The Kansas City Fed wrote that BNPL offers "convenience and flexibility" but also "constraints," especially when borrowers use multiple services at once. Consumer Reports' 2023 case study was blunter: digital credit standards are lagging badly, and borrowers are being left to sort out overlapping installments on their own.

The scale of the issue makes those warnings hard to ignore. U.S. credit card balances went past \$1.14 trillion in 2023. Surveys from the New York Fed show that about one in five adults had used BNPL in the previous year, with the highest rates among people already describing themselves as financially fragile. Business Insider described this as "phantom debt" because so much of it is not reported to the credit bureaus. Without a full picture, households can underestimate how much they owe, and lenders can misjudge risk.

Some responses are already on the table. Consumer Reports has urged rules requiring plain-language disclosure of installment schedules and total costs. The New York Fed has pointed out that adding BNPL obligations to credit files would give both borrowers and lenders a clearer view of exposure. Researchers who study nudges have argued that small design changes, such as reframing minimum payments or sending reminders, could be built into regulation instead of left to chance. At the system level, the Fed notes that BNPL is still small next to credit cards but growing quickly enough to warrant close monitoring.

The hard part is that BNPL also fills a real gap. It often charges no interest if payments are on time and can look cheaper than a card. That appeal is what drives its spread. But as the Richmond Fed put it, growth on this scale "deserves close attention." The policy question is not whether BNPL should exist, but how to make sure the design of these products does not amplify present bias, anchoring, and other predictable habits that lead to long-term debt.

CASE STUDY: BUY NOW, PAY LATER AS A WINDOW INTO BEHAVIORAL DEBT

Few innovations in consumer finance have grown as fast as Buy Now, Pay Later. Klarna, Affirm, Afterpay, and similar providers have made installment payments a standard feature on retail websites. The model seems simple: break a purchase into four or more payments, usually interest-free if paid on time. That promise of "zero cost" has fueled adoption. The New York Fed reported that by 2024 over 20 percent of U.S. adults had used BNPL in the past year. Younger consumers and financially fragile households were most likely to participate.

Spending Behavior

The effect on spending has been measured directly. Ashby and colleagues (2025) studied millions of transactions and found that the shift in timing between purchase and payment encouraged higher spending. Kumar et al. (2024) put a precise number on it: when BNPL was introduced, consumer spending rose by about 6.4 percent. This is not trivial. For a household already struggling with rising credit card balances, even a modest increase in discretionary spending can stretch budgets thin. In Sweden, research also showed that BNPL use was tied to impulsive buying and higher levels of materialism, suggesting that the product connects with existing psychological tendencies rather than changing them outright.

Visibility and Risk

One of the sharpest criticisms of BNPL is that its obligations often sit outside of traditional credit reporting. Business Insider described this as "phantom debt." A borrower may see each installment as small and manageable, but when multiple BNPL purchases are active, the total can rival a credit card balance. Because most credit bureaus do not systematically record this data currently, lenders and borrowers both stand to undercount aggregate exposure. This lack of disclosure was one of the major concerns brought forward in Consumer Reports' 2023 case study that argued that online credit benchmarks need to demand better disclosure and easier comparison between providers.

Defaults and Overlap with Credit Cards

The Kansas City Fed further stated that the convenience of BNPL does not eliminate delinquent payment risk. Overlapping multiple loans can cause cash-flow squeezes, and high late fees are possible. In some surveys, BNPL users admitted to using credit cards to cover missed installments from time to time, in effect, using one form of debt to cover another. This cycle illustrates how "low-cost" borrowing can spill over into traditional credit markets.

Policy Relevance

Richmond Fed 2025 economic brief placed BNPL as being a double-edged sword: convenient at providing convenience but risky when combined with such behavioral biases like present bias and over-optimism. Regulators see potential in requiring clearer disclosures, integrating BNPL into credit reports, and applying the same consumer protection standards that already govern credit cards. The central concern is not that BNPL exists but that its rapid growth, layered on top of record \$1.14 trillion in U.S. credit card debt, could amplify financial fragility if left unmonitored.

This case study illustrates how a single product can be utilized as a lens through which to observe broader problems in consumer finance. BNPL illustrates the core behavioral drivers summarized above, misestimation of future cost, anchoring of payment behavior, and the tendency to think about obligations in isolation. It also illustrates how product design can exploit these, leading to greater spending and undisclosed liabilities. By situating BNPL together with conventional credit, policymakers and researchers are able to better understand the interaction of design and psychology in influencing household debt.

II. RECOMMENDATIONS AND FUTURE DIRECTIONS

The evidence gathered so far points in two directions at once. On the one hand, products like BNPL meet real demand. For many households, spreading payments into smaller chunks makes a purchase possible without turning immediately to a high-interest credit card. On the other hand, the same design features that make BNPL appealing also increase the risk of overextension. The "phantom debt" problem, described by Business Insider, shows how easily borrowers can lose track of what they owe when obligations are hidden from credit reports. At the same time, revolving credit balances in the U.S. remain above \$1.14 trillion, which suggests that BNPL is layering on top of existing debt rather than replacing it.

Consumer Reports, in its 2023 case study, pushed for something fairly straightforward: clearer and more standardized disclosures. Right now, repayment schedules are often presented in ways that downplay the total cost. The New York Fed has also flagged the absence of BNPL data in credit files, which leaves both lenders and borrowers with an incomplete picture. Without those reforms, households are navigating in the dark.

Field experiments provide another angle. Studies by Guttman-Kenney and others show that repayment choices respond to small changes in framing. When payment boxes are worded differently, or when reminders are sent at the right time, repayment behavior shifts. These results suggest that design standards, not just disclosure rules, deserve more attention from regulators. The Richmond Fed added that although BNPL volumes remain smaller than credit card debt, the pace of growth justifies closer oversight.

Future research needs to consider the longer run than just short-run spending effects. We know that BNPL raises spending by around 6.4 percent (Kumar et al., 2024), but less about what happens in the longer term. Do consumers eventually shift away from credit cards, or does BNPL create another source of tension? comparisons may help answer that. The Swedish findings on impulsive buying point to cultural and psychological factors that could differ from the U.S.

The main thread running through these discussions is that credit markets are being reshaped quickly, and institutions are catching up more slowly. Striking a balance, encouraging innovation while avoiding new debt traps, will be the hard part of policy in the years ahead.

III. CONCLUSION

Household debt today looks very different from a generation ago. Credit cards still dominate, with U.S. balances rising above \$1.14 trillion in 2023, but BNPL has quickly reshaped borrowing. By 2024, over 20 percent of adults had used BNPL, with the highest use among financially fragile households. Debt is not just increasing; its form is changing.

Research shows psychology and product design drive these shifts. Present bias explains why BNPL boosts spending by about 6.4 percent (Kumar et al., 2024). Anchoring helps explain why credit cardholders stick to minimum payments, and Swedish studies connect BNPL to impulsivity and materialism. Borrowing choices, in other words, are not determined by interest rates alone.

The BNPL case study made this clear: installment loans raise spending, hide obligations from credit reports, and often overlap with credit card debt, creating "phantom debt" (Business Insider). Regulators have begun to react – the Richmond Fed described BNPL as a "market innovation" worth scrutiny, while Consumer Reports called for digital standards and clearer disclosure – but policy remains slow compared to market growth.

The lesson is that debt markets cannot be understood without behavior. Repayment and disclosure choices shape outcomes. Policymakers will need to balance the flexibility that makes BNPL popular with safeguards against deeper indebtedness, building a credit system that supports households rather than weakening them.

REFERENCES

- [1]. Ashby, R., et al. "The Influence of the Buy-Now-Pay-Later Payment Mode on Consumer Spending." Journal of Consumer Research, 2025. Elsevier. https://www.sciencedirect.com/science/article/pii/S002243592500003X
- Kumar, A., et al. "The Effects of Buy Now, Pay Later (BNPL) on Customers' Spending Behavior." Journal of Consumer Research, [2]. 2024. Elsevier. https://www.sciencedirect.com/science/article/pii/S0022435924000654
- Hamid, F. S. "Behavioral Biases and Over-Indebtedness in Consumer Credit." Cogent Economics & Finance, vol. 13, no. 1, 2025. [3]. Taylor & Francis. https://www.tandfonline.com/doi/full/10.1080/23322039.2024.2449191.
- Beshears, John, et al. "Nudging Debtors to Pay Their Debt: Two Randomized Trials." Journal of Economic Behavior & Organization, [4]. vol. 200, 2022, pp. 182-198. Elsevier. https://www.sciencedirect.com/science/article/pii/S0167268122001329
- Guttman-Kenney, Benedict, et al. The Semblance of Success in Nudging Consumers to Pay. Working Paper, 2021. [5]. https://bguttmankenney.github.io/Public/Semblance Paper.pdf.
- Federal Reserve Bank of Richmond. "Buy Now, Pay Later: Market Impact and Policy." *Economic Brief*, no. 25-03, Feb. 2025. [6]. https://www.richmondfed.org/publications/research/economic_brief/2025/eb_25-03.
 Federal Reserve Bank of Kansas City. "Buy Now, Pay Later: Convenience and Constraints." TEN Magazine, 2023.
- https://www.kansascityfed.org/ten/buy-now-pay-later-convenience-and-constraints/.
- Armantier, Olivier, et al. "How and Why Do Consumers Use 'Buy Now, Pay Later'?" Liberty Street Economics, Federal Reserve [8]. Bank of New York, Feb. 2024. https://libertystreeteconomics.newyorkfed.org/2024/02/how-and-why-do-consumers-use-buy-now-
- [9]. Taylor, John. Consumer Credit from Theory to Practice. Harvard DASH, 2010. https://dash.harvard.edu/items/11141f59-87ea-4184-8a5a-74ce13f78b73
- [10]. Ladas, Anastasios, et al. "A Data Mining Framework to Model Consumer Indebtedness with Psychological Factors." arXiv preprint, 2015 https://arxiv.org/abs/1502.05911
- Akinwande, T., et al. "Data Analysis on Credit Card Debt: Rate of Consumption and Impact on Individuals and the US Economy." [11]. arXiv preprint, 2024. https://arxiv.org/abs/2407.11146.
- Consumer Reports. Buy-Now-Pay-Later: A Case Study for a Digital Standard. May 2023. https://advocacy.consumerreports.org/wp-[12]. content/uploads/2023/05/Buy-Now-Pay-Later-A-Case-Study-for-a-Digital-Standard-1-2.pdf.
- [13]. Ramsay, Iain. "Behavioral Economics, Overindebtedness and Comparative Consumer Bankruptcy." University of Toronto Law Journal, https://www.researchgate.net/publication/228146411 Behavioral Economics Overindebtedness Comparative Consumer Bankrup tcy_Searching_for_Causes_and_Evaluating_Solutions.