

**Buy Now Pay Later(BNPL) regulatory gap: Evidence for Consumer Protection Reform
from CFPB Complaints**

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Abstract

Buy Now, Pay Later (BNPL) services have reshaped consumer credit in the United States.

Younger consumers are especially drawn to platforms like Klarna and Affirm because they offer a frictionless, often “interest-free” alternative to traditional credit, typically without a hard credit check. But that ease of use can make BNPL feel low-risk, encouraging consumers to take on multiple simultaneous loans without fully understanding the obligations involved.

A major concern is the regulatory gap surrounding these products. Because BNPL providers often classify their offerings as deferred payments rather than loans, they generally fall outside the Truth in Lending Act (TILA), the main federal law governing consumer credit disclosure. As a result, millions of Americans use credit products without the protections credit card users receive, including standardized APR disclosure, clear cost-of-credit statements, and guaranteed dispute rights.

This project examines whether the current regulatory framework adequately protects BNPL consumers through three methods: (1) exploratory data analysis of CFPB consumer complaint data to track complaint trends and common issues; (2) natural language processing of complaint narratives to identify recurring harms in consumers’ own words; and (3) a structured regulatory gap analysis comparing BNPL disclosure practices with TILA requirements for credit card issuers. Together, these analyses support policy recommendations aimed at closing the regulatory gap while preserving the accessibility benefits BNPL can provide.

Introduction

Buy Now Pay Later has emerged as one of the fastest-growing segments of consumer finance in the United States. Between 2019 and 2023, BNPL loan originations expanded dramatically, with six major lenders alone originating 335.8 million loans totaling \$45.2 billion in 2023, at an average loan size of \$135 (CFPB, 2025b). The appeal of BNPL is generally straightforward: consumers split a purchase into four equal, interest-free installments with no hard credit check and near-instant approval at the digital checkout. For consumers who are credit-constrained or credit-averse, BNPL functions as a practical and psychologically accessible alternative to traditional credit.

Yet this accessibility comes with a malformed structural asymmetry that became controversial upon regulators. Unlike credit cards, which are explicitly governed by the Truth in Lending Act (TILA, 15 U.S.C. §§1601 et seq.) and its implementing Regulation Z (12 CFR Part 1026), BNPL products occupy an ambiguous legal category. Because they are typically structured as four-installment, zero-interest deferred payment agreements rather than conventional loans, they have historically fallen outside TILA's mandatory disclosure requirements (CFPB, 2015; CRS, 2024). The result is that millions of Americans are using credit products with none of the transparency protections automatically afforded to credit card users: no mandatory APR disclosure, no standardized cost-of-credit statement, and no legally guaranteed right to dispute charges.

This paper aims to investigate whether the current regulatory framework adequately protects BNPL consumers. Using CFPB complaint data, natural language processing of consumer narratives, and a structured regulatory gap analysis, the paper documents the scope of

consumer harm and evaluates the adequacy of the existing legal framework. The analysis concludes with policy recommendations.

Literature review

The BNPL market has grown rapidly since 2019, when it first gained significant traction in the United States. By 2022, more than one-fifth (21.2%) of consumers with a credit record had used a BNPL loan at least once, up from 17.6% in 2021 (CFPB, 2025a). CFPB research has documented that BNPL borrowers are disproportionately drawn from financially vulnerable populations: Black, Hispanic, and female consumers are significantly more likely to use BNPL compared to white, non-Hispanic, and male consumers, with usage highest among households earning between \$20,001 and \$50,000 annually (CFPB, 2023). Approximately 63% of BNPL borrowers held multiple simultaneous BNPL loans at some point during 2022 (CFPB, 2025a)—a pattern the CFPB flagged as a significant risk given the absence of any cross-lender reporting infrastructure.

Younger borrowers are particularly exposed. Among borrowers aged 18–24, BNPL purchases constituted 28% of total unsecured consumer debt during active borrowing months, compared to an average of 17% across all age groups (CFPB, 2025a). This concentration of BNPL debt among younger, lower-income, and minority consumers raises important equity concerns about who bears the costs of regulatory inaction.

Data

The primary dataset is the CFPB Consumer Complaint Database, a publicly available repository of consumer complaints regarding financial products and services. Complaints are

submitted by consumers directly and forwarded to the relevant company for response. The database includes structured fields (complaint type, company response, timeliness of response) as well as unstructured consumer-authored narratives, which are included when the consumer provides consent.

The analysis focuses on complaints filed against Affirm Holdings, Inc. and Klarna AB, the two largest BNPL providers in the U.S. market, covering the period from January 2023 through April 2026. This window captures the period of significant BNPL market expansion documented in CFPB market reports (CFPB, 2025b) and encompasses the period during which the CFPB's interpretive rule was issued and contested. The final dataset contains 13,396 complaints: 11,755 against Affirm and 1,641 against Klarna.

For the regulatory gap analysis, three categories of primary source documentation are used.

TILA and Regulation Z requirements are drawn from the Code of Federal Regulations (12 CFR Part 1026), specifically provisions §1026.6 (account-opening disclosures), §1026.7 (periodic statements), §1026.13 (billing error rights), §1026.60 (credit card application disclosures), and §1026.51 (ability-to-pay assessment). Affirm's disclosure practices are documented through the *Affirm General Terms of Service* (affirm.com/legal/terms), *Affirm Privacy Policy*, and Klarna's disclosure practices are documented through the equivalent sources: the *Klarna User Terms* (klarna.com/us/legal), *Klarna Privacy Notice*.

Method

Three methods are applied to these data sources. First, for exploratory data analysis (EDA), structured complaints are analyzed to document (1) temporal trends in complaint volume, (2) the distribution of complaint issue types, (3) the rate at which companies provide substantive relief

to complainants, and (4) patterns specific to disclosure-related complaints. Figures in this section are generated from the full dataset of 13,396 complaints.

Second, for natural language processing, consumer complaint narratives (available for 4,791 complaints for which consumer consent was provided) are analyzed using two approaches. First, TF-IDF (term frequency–inverse document frequency) vectorization is used to identify the most distinctive keywords in the corpus, with keywords categorized by regulatory theme to link consumer language to specific legal frameworks. Second, Latent Dirichlet Allocation (LDA) topic modeling with six topics is applied to the full narrative corpus to identify latent harm patterns in consumers’ own language.

Third, for regulatory gap analysis, a structured comparison of TILA’s mandatory disclosure requirements (as specified in Regulation Z, 12 CFR Part 1026) with the actual disclosure practices of Klarna and Affirm is conducted through company terms of service, user agreements. Seven disclosure dimensions are evaluated: APR disclosure, standardized cost-of-credit statements, dispute rights, credit bureau reporting notification, late-fee pre-disclosure, periodic account statements, and ability-to-pay assessment.

Result

The first finding from the complaint data is the dramatic acceleration of BNPL-related complaints over the analysis period. As shown in Figure 1, complaint volume rose from 1,283 in 2023 to 3,047 in 2024, and further to 6,231 in 2025, an increase of nearly double every year. This trajectory substantially outpaces the growth in BNPL loan originations reported by the CFPB over the same period (CFPB, 2025b), suggesting that consumer harm is increasing faster than the underlying market.

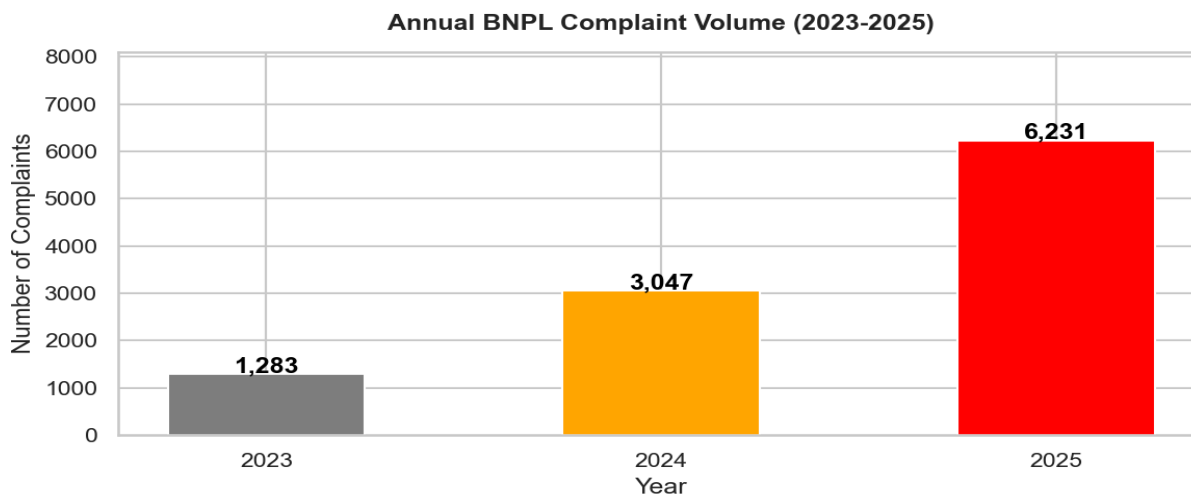


Figure 1. Annual BNPL Complaint Volume (2023–2025). Year-over-year growth rates shown above each bar. Source: CFPB Consumer Complaint Database.

Figure 2 displays the ten most frequently reported complaint issues. The single most common issue—"Incorrect information on your report"—accounts for 3,327 complaints, or approximately 25% of the entire dataset. All four of the most common categories relate to credit reporting: inaccurate information, debt collection overreach, investigation failures, and improper use of credit files. Taken together, these four categories account for more than half (52%) of all complaints filed.

This pattern is a direct consequence of the TILA exemption. Because BNPL transactions are not subject to the dispute resolution requirements that apply to credit cards under Regulation Z, consumers have no federally guaranteed mechanism to correct errors in how BNPL activity is reported to credit bureaus. The CFPB has noted that BNPL lenders' reporting practices are highly inconsistent—some furnish data to credit bureaus and some do not—creating an opaque system in which consumers cannot know in advance how a BNPL transaction will affect their credit profile (CFPB, 2022).

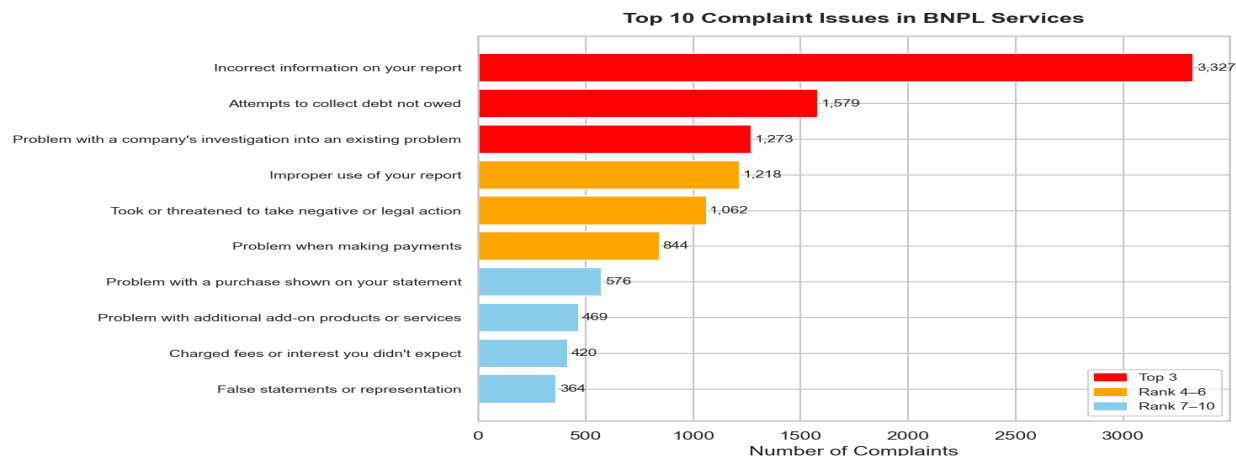


Figure 2. Top 10 Complaint Issues in BNPL Services. Red bars indicate the three most frequently reported categories. Source: CFPB Consumer Complaint Database.

The next interesting finding in the EDA is the near-complete absence of substantive relief in company responses to consumer complaints. As shown in Figures 3 and 4, of the 13,396 complaints in the dataset, 13,291 (99.2%) were closed with "explanation only", meaning the company acknowledged the complaint but provided no monetary or non-monetary remedy. Only 95 complaints (0.7%) resulted in any form of actual relief.

Disaggregating by issue type makes the pattern even starker. For the most commonly reported issue—"Incorrect information on your report" (n=3,327), the relief rate is 0.03%, meaning that in over three thousand cases of alleged credit reporting errors, companies provided substantive resolution in exactly one instance. For "Improper use of your report" (n=1,218) and "False statements or representation" (n=364), the relief rate is 0.0%.

This pattern reveals a systematic disconnect between formal responsiveness (companies replied to 99.9% of complaints) and substantive accountability (companies resolve almost none of them). Under the existing voluntary complaint response framework, consumers have no legally enforceable right to dispute resolution—a protection that credit card users enjoy under

TILA's Fair Credit Billing provisions. The complaint response data constitutes empirical evidence of what the absence of that right looks like in practice.

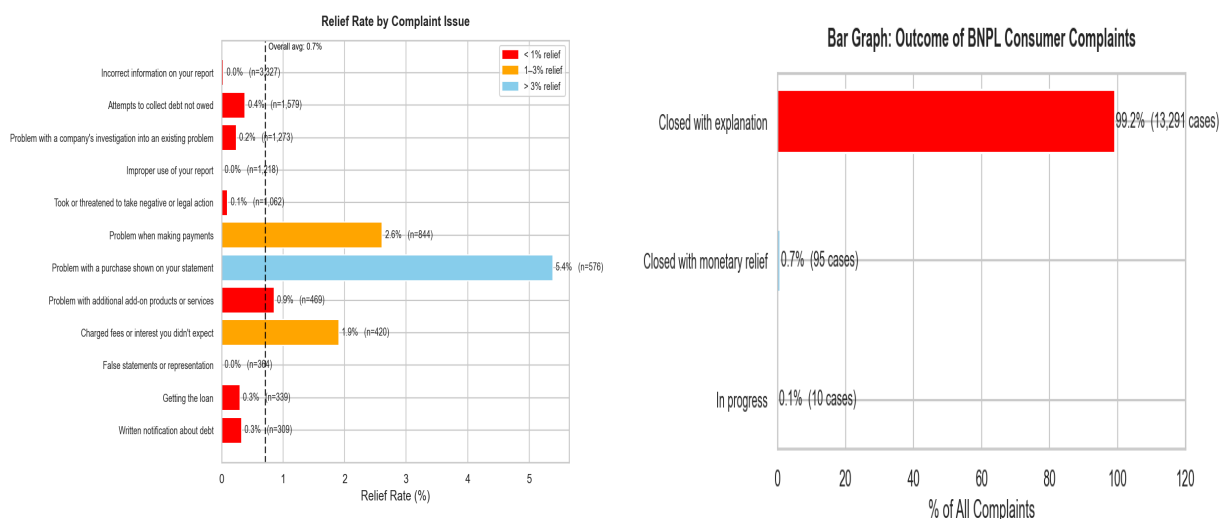


Figure 3. Relief Rate by Complaint Issue Type. Red bars indicate issues where fewer than 1% of complaints received any relief. The dashed line shows the overall average (0.7%). Source: CFPB Consumer Complaint Database

Figure 4. Outcome of BNPL Consumer Complaints. Of 13,396 total complaints, 99.2% were closed with explanations only. Source: CFPB Consumer Complaint Database

Figure 5 plots each product category along two dimensions simultaneously, complaint volume (x-axis) and relief rate (y-axis), assigning each to one of four quadrants defined by the dataset medians.

Credit Reporting and Debt Collection occupy the most problematic quadrant: high complaints, low relief (red). Credit Reporting alone accounts for over 5,200 complaints while carrying a near-zero relief rate of approximately 0.1%. Debt Collection follows a similar pattern at roughly 3,500 complaints and 0.2% relief. These two categories together represent the dominant harm profile in the BNPL complaint.

Personal Loan/BNPL sits at the boundary between quadrants, with approximately 2,800 complaints and a 1.4% relief rate that places it just above the median relief threshold. While

technically classified as "High complaints + High relief" by the median cutoff, this categorization is misleading: a 1.4% relief rate means that for every 100 BNPL consumers who file a complaint, fewer than two receive any substantive resolution.

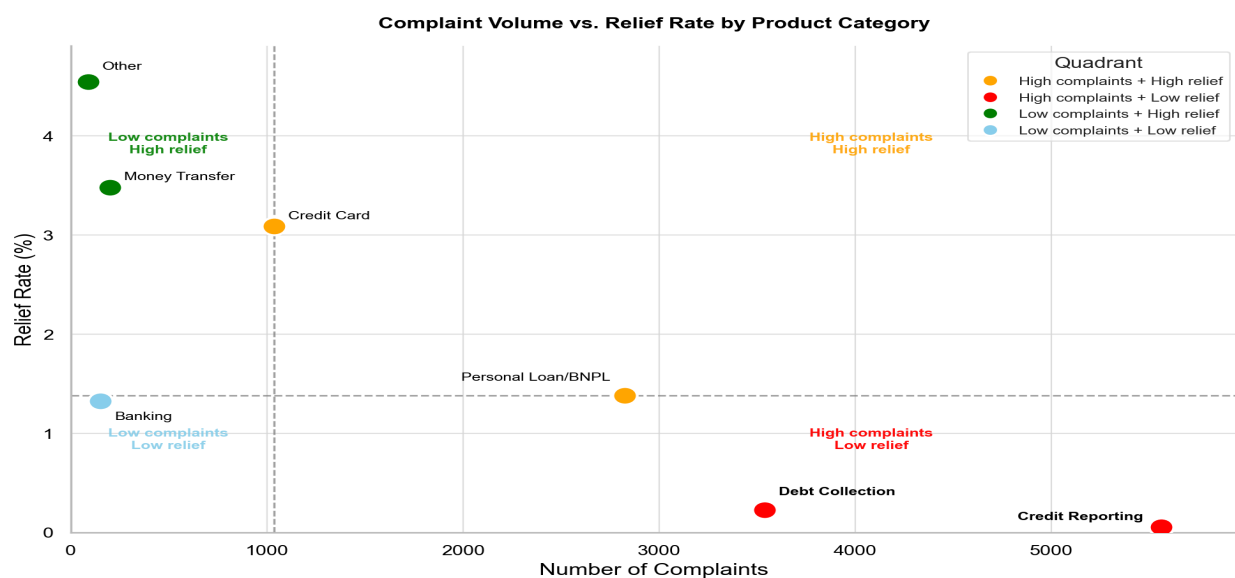


Figure 5. Disclosure and Misleading Complaint Trends Over Time. Issues directly linked to TILA non-compliance. Source: CFPB Consumer Complaint Database.

Figure 6 visualizes the most frequently occurring terms across 4,791 complaint narratives. The dominant terms, "credit," "report," "debt," "dispute," "refund", confirms EDA findings: BNPL consumers are not primarily describing product dissatisfaction but legal and financial harm. The prevalence of "dispute" and "report" as core lexical anchors is particularly significant, as these are precisely the mechanisms, dispute resolution and credit reporting, that TILA governs for credit card users but does not mandate for BNPL.

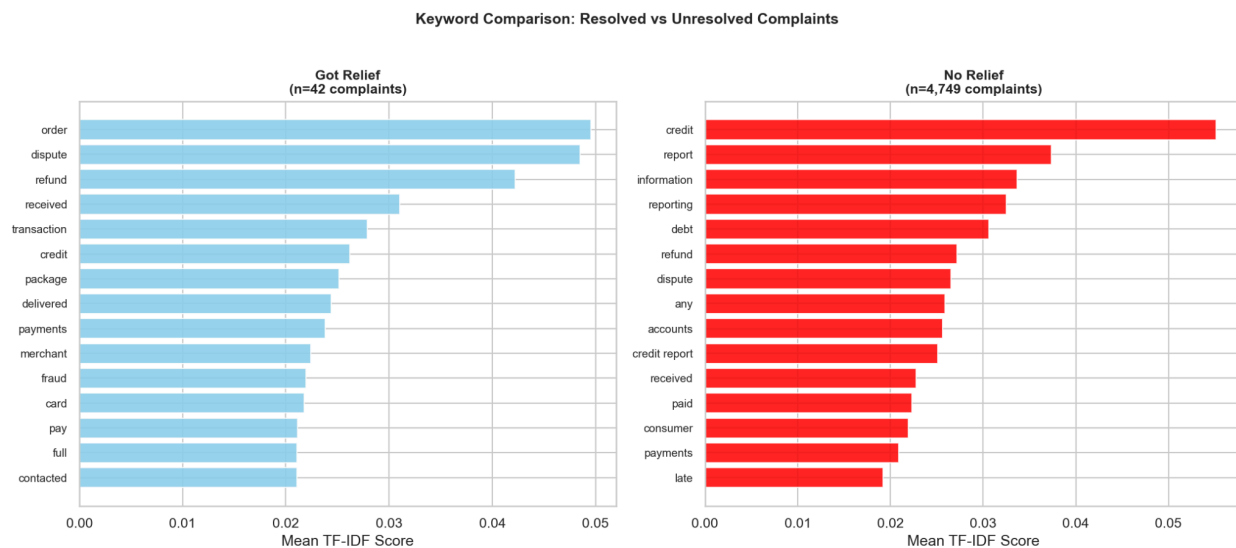


Figure 7. Keyword Comparison: Resolved vs. Unresolved Complaints. Left panel: 95 complaints that received relief. Right panel: 4,696 that did not. Source: CFPB Consumer Complaint Database.

Figure 8 quantifies the frequency with which consumers invoke regulatory concepts in their narratives. Dispute rights appear in 38.5% of narratives, fraud and identity theft in 25.8%, and FCRA/credit rights in 19.8%. Critically, TILA-related terms: APR, finance charge, annual percentage rate, appeared in only 3.1% of narratives.

From this finding, consumers know they have rights under the FCRA because credit reporting disputes are established legal terrain. They do not invoke TILA because, for BNPL products, TILA does not apply, and consumers cannot assert rights they do not have. The low frequency of TILA-related terms is not evidence of consumer satisfaction with BNPL disclosures; it is evidence that the legal framework for asserting those rights does not exist.

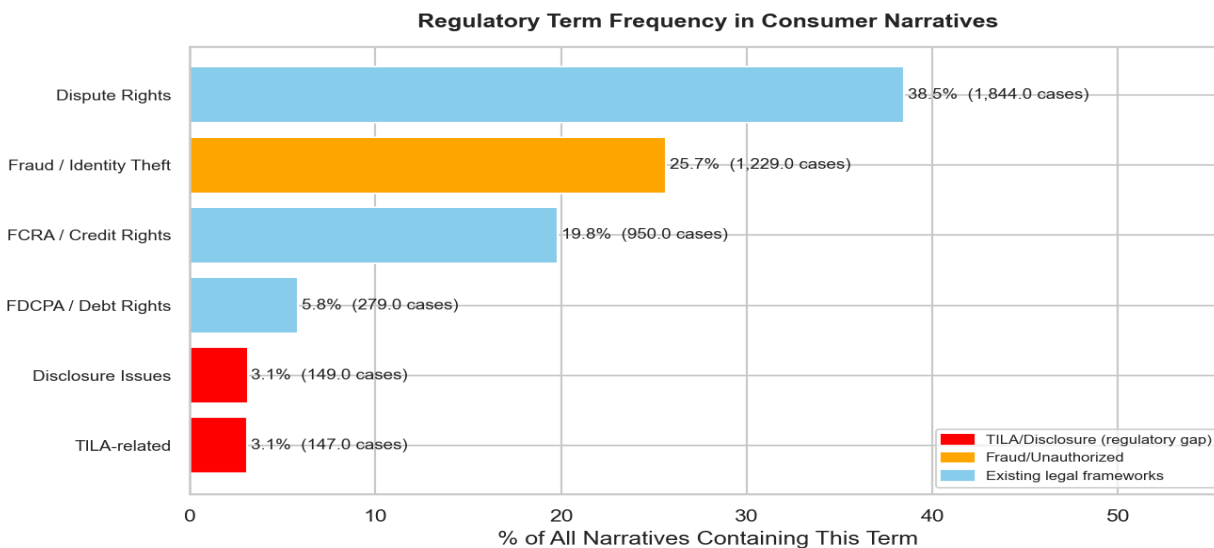


Figure 8. Regulatory Term Frequency in Consumer Narratives. Red bars indicate TILA/disclosure-related terms directly associated with the regulatory gap. Source: CFPB Consumer Complaint Database.

LDA topic modeling with six topics, shown in Figure 9, identifies the following latent harm patterns in the narrative corpus: (1) credit report inaccuracy, (2) FCRA and privacy violations, (3) refund and merchant disputes, (4) debt collection, (5) unauthorized charges and fees, and (6) identity theft and fraud. The two largest topics by average weight are credit report inaccuracy and FCRA/privacy violations, confirming at the topic-model level the pattern identified through both the EDA and the TF-IDF analysis.

The presence of a distinct identity theft topic is consistent with the CFPB's finding that BNPL's soft-pull underwriting model creates heightened exposure to account opening fraud (CFPB, 2022). The unauthorized charges and fees topic maps directly onto the disclosure-related complaints identified in the EDA: consumers encountering charges they did not expect because those charges were never clearly disclosed.

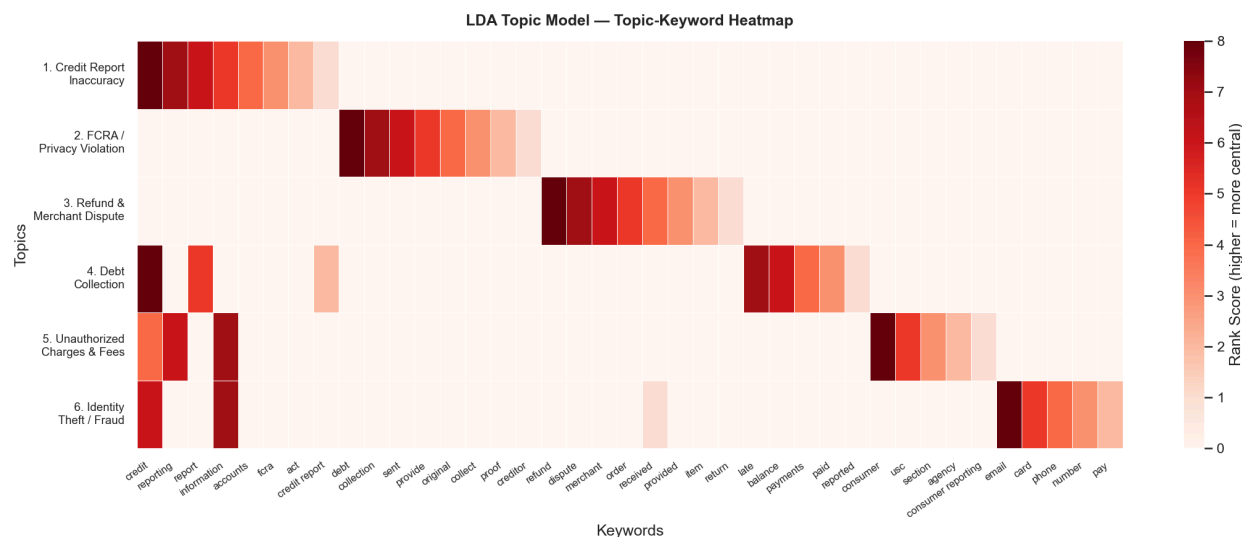


Figure 9. LDA Topic-Keyword Heatmap (6 Topics). Heatmap values represent keyword rank score within each topic; darker cells indicate more central keywords. Source: CFPB Consumer Complaint Database.

The following analysis compares the mandatory disclosure and consumer protection requirements imposed by TILA and Regulation Z on credit card issuers against the documented disclosure practices of Affirm and Klarna. This comparison is drawn from review of Regulation Z (12 CFR Part 1026), company terms of service, and user-facing documentation as of early 2026.

Disclosure Requirement	TILA / Regulation Z (Credit Cards)	Affirm	Klarna
Mandatory APR Disclosure	Yes — standardized, must appear prominently at origination (Reg Z § 1026.6)	No — pay-in-4 marketed as "0% interest"; APR not disclosed	No — same structure; APR absent from checkout flow
Standardized Cost-of-Credit Statement	Yes — finance charge, total amount financed, APR in uniform format	No — no standardized cost summary provided to consumers	No — no standardized disclosure at point of sale
Right to Dispute Billing Errors	Yes — Fair Credit Billing Act guarantees 60-day dispute window with mandatory investigation	No — dispute process exists internally but not federally mandated	No — voluntary dispute process; no legally enforceable timeline
Credit Bureau Reporting Notification	Yes — adverse action and reporting practices must be disclosed	Inconsistent — some accounts reported, some not; no advance notice	Inconsistent — soft-pull underwriting; reporting varies by product
Late Fee Pre-Disclosure	Yes — all fees must be disclosed before credit is extended	Partial — late fees disclosed in terms of service, not at checkout	Partial — late fees disclosed in terms of service, not at checkout
Periodic Account Statements	Yes — monthly statements required for open-end credit	No — no TILA-mandated periodic statements	No — app-based notifications only; not TILA-compliant
Ability-to-Pay Assessment	Required for open-end credit under Regulation Z	No — soft pull only; no income verification for pay-in-4	No — instant approval without income verification

Table 1. Regulatory Gap Analysis: TILA Requirements vs. BNPL Practice (Affirm and Klarna). Sources: 12 CFR Part 1026; Affirm Terms of Service (2026); Klarna User Agreement (2026).

The table reveals a systematic pattern: across all seven disclosure dimensions, BNPL products either entirely lack or only partially satisfy requirements that are mandatory for credit card issuers under Regulation Z. The most consequential gaps are in APR disclosure, standardized cost-of-credit statements, and dispute rights—the three dimensions most directly relevant to the consumer harms documented in the EDA and NLP analyses above.

The absence of a legally guaranteed dispute right is particularly significant. Under the Fair Credit Billing Act, implemented through Regulation Z, credit card holders have a federally guaranteed 60-day window to dispute billing errors, with a mandatory investigation obligation imposed on the creditor. BNPL consumers have no equivalent right. When they dispute transactions, they are relying on the voluntary internal processes of companies that, as shown in Section 4.1.3, provide substantive relief in fewer than 1% of cases.

The inconsistency of credit bureau reporting practices across BNPL providers creates a further asymmetry. Because some BNPL transactions are reported to credit bureaus and some are not—and because consumers are not reliably notified which applies—BNPL use can have unpredictable effects on credit scores. This opacity is inconsistent with the transparency norms embodied in the FCRA and with the disclosure requirements that TILA imposes on other consumer credit products.

The evidence presented in this paper supports three specific, implementable policy recommendations directed at Congress and the CFPB. These recommendations are calibrated to address documented harms without eliminating the accessibility benefits that BNPL has delivered to underserved consumers (CFPB, 2023). They do not impose interest rate caps,

require ability-to-pay assessments for all BNPL products, or mandate universal credit bureau reporting, changes that could reduce product availability for credit-constrained consumers. The goal is not to make BNPL look like a credit card; it is to ensure that consumers using BNPL have the same basic informational and procedural rights that consumers using credit cards already enjoy.

Policy recommendations

From findings, BNPL business holds issues in terms of customer protection, so, some policies are needed for modification, as current discussion on BNPL holds in regulators. Based on the findings there could be three recommendations, These recommendations are calibrated to address documented harms without eliminating the accessibility benefits that BNPL has delivered to underserved consumers (CFPB, 2023). They do not impose interest rate caps, require ability-to-pay assessments for all BNPL products, or mandate universal credit bureau reporting—changes that could reduce product availability for credit-constrained consumers. The goal is not to make BNPL look like a credit card; it is to ensure that consumers using BNPL have the same basic informational and procedural rights that consumers using credit cards already enjoy.

The first recommendation is a statutory amendment clarifying that BNPL products meet a defined threshold. For example, any deferred payment product resulting in a consumer credit obligation is subject to TILA's mandatory disclosure requirements. At a minimum, this should include mandatory APR disclosure, standardized cost-of-credit statements, and written dispute resolution procedures. This recommendation directly addresses the findings in Figure 5 (growing

disclosure complaints) and Figure 8 (consumers' inability to invoke TILA rights). It does not require BNPL providers to charge interest or restructure their products, it requires only that they disclose the full terms of the credit they are extending in a standardized, consumer-readable format.

The second recommendation is to mandate consistent credit bureau reporting with Consumer Notification. Figures 2 and 3 document that credit reporting errors are the most common and least-resolved category of BNPL complaints, accounting for over 25% of all complaints and receiving substantive relief in fewer than 1% of cases. The root cause is the inconsistency of current BNPL reporting practices: some providers furnish data to credit bureaus and some do not, and consumers have no way to know which applies to their transaction. The CFPB should issue a rule, within its existing authority under the Fair Credit Reporting Act, requiring that: (a) BNPL lenders who furnish data to credit bureaus do so consistently and accurately; and (b) consumers be notified at the point of origination, in plain language, whether their BNPL activity will be reported to credit bureaus.

This recommendation would not require all BNPL providers to report to credit bureaus, a requirement that could harm consumers with thin credit files if BNPL activity were to generate negative marks. It would require only transparency: consumers should know in advance whether a BNPL transaction will affect their credit profile.

The third recommendation is to establish a federal BNPL dispute resolution Standard. Figure 4 documents that 99.2% of BNPL complaints are closed without any substantive relief. This outcome is predictable in a system where companies face no legal obligation to provide remedy. Congress should establish—either through TILA amendment or standalone legislation—a minimum dispute resolution standard for BNPL products modeled on the Fair Credit Billing

Act's existing framework for credit cards. This standard should include: (a) a defined dispute investigation timeline (the FCBA's 30/90-day framework is an appropriate model); (b) a written notice requirement informing consumers of the investigation outcome; and (c) a consumer right to escalate unresolved disputes to the CFPB, with the CFPB empowered to enforce resolution obligations.

The NLP analysis reveals that complaints involving credit reporting errors, the category that receives almost no relief under the current framework, are structurally different from complaints that companies do resolve. This is not a failure of company willingness; it is a failure of legal obligation. A federal dispute resolution standard would convert a currently unenforceable consumer expectation into a legally binding company obligation.

Conclusion

This paper has documented, through quantitative analysis of 13,396 CFPB complaints and 4,791 consumer narratives, that BNPL services are generating significant and growing consumer harm, and that the existing regulatory framework provides consumers almost no mechanism. Complaint volume grew by more than 100% per year between 2023 and 2025. Credit reporting errors are the most common category of harm, and companies provide substantive relief in fewer than 1% of cases. Consumers cannot invoke TILA protections because those protections do not apply to their BNPL products. The language consumers use in their own narratives, "dispute," "credit report," "inaccurate," "FCRA", maps precisely onto the rights they have under existing law for other credit products, and precisely onto the rights they lack for BNPL.

The regulatory gap analysis confirms that this asymmetry is not incidental. Across all seven disclosure dimensions evaluated, BNPL products either entirely lack or only partially satisfy the requirements that Regulation Z imposes on credit card issuers. The gap is not a technicality; it is a deliberate product design feature that transfers risk from lenders to consumers, and it is growing as the market grows.

The three policy recommendations in this paper, TILA extension, mandatory reporting transparency, and a federal dispute resolution standard, would close the most consequential dimensions of that gap without foreclosing the genuine accessibility benefits that BNPL has brought to underserved consumers. The evidence presented here provides the empirical foundation policymakers need to act. The tools already exist; what is needed is the will to use them.

Several limitations exist in this research. The CFPB complaint database captures only consumers who filed a formal federal complaint, likely underrepresenting the true scope of harm. Complaint narratives are available for only 36% of the dataset, so NLP findings should be interpreted as indicative rather than exhaustive. The regulatory gap analysis relies on publicly available company documentation and may not fully reflect internal practices. Finally, the analysis covers two providers only, and findings may not generalize to the broader BNPL market. Future research should examine a whole industry and incorporate consumer-level data to assess the long-term credit impacts of BNPL use.

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