#Fintok and Financial Regulation

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Social media platforms are becoming an increasingly important site for consumer finance. This phenomenon is referred to as "FinTok," a reference to the "#fintok" hashtag that often identifies financial content on TikTok, a popular social media platform. This Essay examines the new methodological possibilities for consumer financial regulation due to FinTok. It argues that FinTok content offers a novel and valuable source of data for identifying emerging fintech trends and associated consumer risks. As such, financial regulators should use FinTok content analysis—and social media content analysis more broadly—as an additional method for the supervision and regulation of consumer financial markets. This Essay test-drives this method using audiovisual content from TikTok in which consumers discuss their experience with "buy now, pay later," a rapidly growing and less regulated form of fast, digital credit. It reveals tentative evidence of payment difficulties and strategic default in the buy now, pay later credit market, with attendant consumer protection risks. These insights provide a point of entry for the further study and regulation of the buy now, pay later credit market.

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For very helpful comments on this Essay, we thank Dan Björkegren, Craig Cowie, Ben Guttman-Kenney, Ted Janger, Stephan Madaus, and participants in the Law of Consumer Markets Seminar at Boston University, the Harvard Kennedy School Roundtables on Buy Now Pay Later, the Harvard Business School Digital Doctoral Workshop, the Teaching Consumer Law Conference hosted by the Berkeley Center for Consumer Law and Houston Consumer Law Center, the Global Bankruptcy Scholars Workshop at Brooklyn Law School, the UCLA Institute for Technology, Law and Policy's Tech Talk workshop, the virtual CS+Law research workshop, and the 2022 Conference of the Association of Internet Researchers. This Essay was written using a template generously made available by Yonathan Arbel.

I. INTRODUCTION

Technology moves fast and the law often struggles to keep up.[1] This is particularly true in consumer finance, where new ways of constructing and delivering financial products can quickly outpace traditional regulatory frameworks.[2] Indeed, the policy attention garnered by the fintech sector is largely focused on how best to regulate new firms and offerings that do not neatly fit into traditional financial laws and which are less amenable to traditional supervisory techniques.[3] In this Essay, we introduce a new data-driven method—social media content analysis—that can help financial regulators catch up with fintech. In doing so, we contribute to the growing trend for data-driven approaches to financial regulation and the multiple calls for regulators to adapt their arsenal to the digital era.[4]

The new regulatory approach developed in this Essay is motivated by evidence of a deepening nexus between social media platforms and consumer financial markets. We call this phenomenon "FinTok," a reference to the "#fintok" hashtag that often accompanies financial content on TikTok, a popular social media platform.[5] A June 2021 study conducted by Credit

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1. This is frequently described as the "pacing problem." *See generally* GARY E. MARCHANT ET AL., THE GROWING GAP BETWEEN EMERGING TECHNOLOGIES AND LEGAL-ETHICAL OVERSIGHT (2011).

2. *See* Joe Adler, *Can Regulators Catch Up to Tech Changes?*, AM. BANKER, https://www.americanbanker.com/news/can-regulators-catch-up-to-tech-changes [https://perma.cc/DLE9-F459].

3. *See* Christopher K. Odinet, *Predatory Fintech and the Politics of Banking*, 106 IOWA L. REV. 1739, 1758–1800 (2021) [hereinafter Odinet, *Predatory Fintech*]; Christopher K. Odinet, *Consumer Bitcredit and Fintech Lending*, 69 ALA. L. REV. 781, 807–26 (2018) [hereinafter Odinet, *Consumer Bitcredit*]; Christopher K. Odinet, *The New Data of Student Debt*, 92 S. CAL. L. REV. 1617, 1618–34 (2019) [hereinafter Odinet, *New Data*].

4. *See, e.g.*, Rory Van Loo, *Rise of the Digital Regulator*, 66 DUKE L.J. 1267 (2017) (making proposals for more effective public digital intermediaries); Douglas W. Arner et al., *FinTech, RegTech, and the Reconceptualization of Financial Regulation*, 37 NW. J. INT'L L. & BUS. 371 (2017) (arguing for new, data-driven approaches to regulating fintech markets); OKIRIZA WIBISONO ET AL., INT'L FIN. CORP., THE USE OF BIG DATA ANALYTICS AND ARTIFICIAL INTELLIGENCE IN CENTRAL BANKING 4 (2019), https://www.bis.org/ifc/publ/ifcb50_01.pdf [https://perma.cc/UNC5-PTQ8] (describing "social networks (human-sourced information such as blogs and searches)" as one of three main sources of big data).

5. *See search results for "#fintok" on TikTok, https://www.tiktok.com/search?q=%23fintok&t=1655089685456 [https://perma.cc/66UC-XLQN]; see also "#fintwit" on Twitter, https://twitter.com/search?q=%23fintwit&src=typed_query [https://perma.cc/NX5Z-6829]*. For popular commentary, see, for example, Cheryl Winokur Munk, *TikTok Is the Place To Go for Financial Advice If You're a Young Adult*, WALL ST. J. (May 2, 2021), https://www.wsj.com/articles/tiktok-financial-advice-11619822409. Note, a growing body of internet studies and digital media research tends to categorize TikTok as a "digital platform"

Karma found that the majority of "Gen Z" and "Millennial" consumers (56%) sought out financial advice from social media "finfluencers," with the majority of Gen Zers seeking this information on TikTok (52%) or Instagram (57%).[6] These trends are consistent with the growing popularity of TikTok among younger demographics.[7] Responding to the rise of FinTok, traditional financial institutions are increasingly turning to TikTok and Instagram to market their products.[8]

Beyond TikTok and Instagram, social media platforms and message boards such as Reddit, Discord, and StockTwits have become central fora for discussion and coordination between retail investors. In some cases, participants in these fora have moved markets—as seen by the short squeeze of the GameStop "meme stock" by participants in the "r/wallstreetbets" subreddit.[9] Social media platforms are also playing a growing role in influencing financial markets by amplifying "fake news."[10]

Each of these nodes within the FinTok paradigm has potentially significant ramifications for financial law. Whereas prior literature has focused on the doctrinal, and specifically securities law, implications of the growing intersection between social media platforms and financial markets, this Essay broadens the lens of analysis to include the new methodological

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rather than a "social media platform." While acknowledging this debate, this essay uses the more familiar terms social media platform, and social media, to refer to TikTok. *See generally* THOMAS POELL, DAVID NIEBORG, & BROOKE ERIN DUFFY, PLATFORMS AND CULTURAL PRODUCTION (2022); TARLETON GILLESPIE, CUSTODIANS OF THE INTERNET: PLATFORMS, CONTENT MODERATION, AND THE HIDDEN DECISIONS THAT SHAPE SOCIAL MEDIA 18-21 (2018).

6. *See Gen Z Turns to TikTok and Instagram for Financial Advice and Actually Takes It, Study Finds*, CREDIT KARMA (July 13, 2021), https://www.creditkarma.com/about/commentary/gen-z-turns-to-tiktok-and-instagram-for-financial-advice-and-actually-takes-it-study-finds [https://perma.cc/3STH-33XP].

7. *See* L. Ceci, *Distribution of TikTok Users in the United States as of September 2021, by Age Group*, STATISTA (Apr. 28, 2022), https://www.statista.com/statistics/1095186/tiktok-us-users-age/ [https://perma.cc/W2C6-GLBJ] (finding that in 2021, 47.4% of TikTok users were under thirty and 61% were women).

8. *See* Paulina Cachero, *World's Most Influential Money Manager Enters the TikTok Sphere*, BLOOMBERG (Feb. 3, 2022), https://bloom.bg/3zJwnLT [https://perma.cc/8PZA-3NL4]; *cf.* JENNIFER OPENSHAW, THE SOCIALLY SAVVY ADVISOR: COMPLIANT SOCIAL MEDIA FOR THE FINANCIAL INDUSTRY 9 (2014) ("[N]early 75% of financial advisors report working for a firm with a written social media policy and 82% of these advisors say the policy restricts social media use or bars it outright.").

9. *See* SEC, STAFF REPORT ON EQUITY AND OPTIONS MARKET STRUCTURE CONDITIONS IN EARLY 2021, at 2–3, 15–43 (2021), https://www.sec.gov/files/staff-report-equity-options-market-struction-conditions-early-2021.pdf [https://perma.cc/QUQ3-HBW3].

10. *See, e.g.*, Shimon Kogan et al., Social Media and Financial News Manipulation 1 n.2 (Sept. 15, 2021) (unpublished paper), https://ssrn.com/abstract=3237763 [https://perma.cc/7MH2-PPAW].

possibilities for consumer financial regulation due to the FinTok paradigm.[11] We argue that FinTok content offers a novel and valuable source of data for identifying emerging fintech trends and associated consumer risks. With the rise of FinTok, social media platforms have become new sites for influencing financial behavior and shaping financial culture through interaction between financial firms and consumers *inter se*.[12] Consumers increasingly discuss their financial experiences in videos posted on TikTok, as well as other social media platforms. These platforms thus offer fertile ground for understanding the experiences and attitudes of credit consumers, particularly younger, digitally native consumers, and the emerging norms of new, digital credit markets.

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11. For prior literature focusing on the securities law implications of the social media/financial markets nexus, see, for example, Tom C. Lin, *The New Market Manipulation*, 66 EMORY L.J. 1253 (2017); Nizan G. Packin, Financial Inclusion Gone Wrong: Securities and Crypto Assets Trading For Children, (June 18, 2021) (unpublished paper), https://ssrn.com/abstract=3862502 [https://perma.cc/T89B-C37G]; Kyle Langvardt & James F. Tierney, *On "Confetti Regulation": The Wrong Way To Regulate Gamified Investing*, 131 YALE L.J.F. 717 (2022); Jill E. Fisch, *Gamestop and the Reemergence of the Retail Investor*, 102 B.U.L. Rev. 1799 (2022); James J. Angel, Gamestonk: What Happened and What To Do About It (May 24, 2021) (unpublished paper), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3782195 [https://perma.cc/TGY2-NKN2]; William J. Magnuson, The Failure of Market Efficiency 34–41 (Apr. 28, 2022) (unpublished paper), https://ssrn.com/abstract=4096270 [https://perma.cc/ZKU9-Y36J]; Dirk A. Zetsche et al., *From Fintech to Techfin: The Regulatory Challenges of Data-Driven Finan*ce, 14 N.Y.U. J.L. & BUS. 393 (2018). More broadly, scholars have examined social media platforms from various doctrinal perspectives. For scholarship focused on TikTok, see, for example, Ali Johnson, *Copyrighting TikTok Dances: Choreography in the Internet Age*, 96 WASH. L. REV. 1225 (2021); David A. Hoffman, *Schrems II and TikTok: Two Sides of the Same Coin*, 22 N.C. J.L. & TECH. 573 (2021); Noam Noked, *A Cut of the TikTok Sale: U.S. Taxation of Inbound Foreign Direct Investments*, 41 VA. TAX REV. 1 (2021); Ganesh Sitaraman, *The Regulation of Foreign Platforms*, 74 STAN. L. REV. 1073 (2022); Amy Adler & Jeanne C. Fromer, *Memes on Memes and The New Creativity*, 97 N.Y.U. L. REV. 453 (2022). There is nascent legal scholarship on the consumer protection risks due to social media influencing, albeit not focused on consumer financial law. *See* Catalina Goanta & Sofia Ranchordas, *The Regulation of Social Media Influencers: An Introduction*, *in* THE REGULATION OF SOCIAL MEDIA INFLUENCERS 1, 1–21 (Catalina Goanta & Sofia Ranchordas eds., 2020).

12. *See* Packin, *supra* note 11, at 32 ("[T]he increasing involvement of influencers in the stock market, ranging from TikTok videos, which have become known as FinTok, to Roaring Kitty's call on Reddit to hold or buy stocks . . . has served as proof that social influencing has advanced to an entirely new level."). The literature on cultural production and consumer debt culture is vast. For the seminal work on cultural production, see Pierre Bourdieu, *The Field of Cultural Production, or: The Economic World Reversed*, 12 POETICS 311 (1983). On the "platformization" of cultural production, see, for example, Brooke E. Duffy et al., *Platform Practices in the Cultural Industries: Creativity, Labor, and Citizenship*, 5 SOC. MEDIA & SOC'Y 1 (Nov. 14, 2019), https://journals.sagepub.com/doi/epdf/10.1177/2056305119879672 [https://perma.cc/52AG-9UUN]. On the evolution of consumer credit culture in the United States, see generally LENDOL CALDER, FINANCING THE AMERICAN DREAM: A CULTURAL HISTORY OF CONSUMER CREDIT (2001).

We argue that financial regulators—specifically, the Consumer Financial Protection Bureau ("CFPB") and correlative state financial services regulators—should use FinTok content analysis and social media content analysis more broadly as an additional tool for performing three chief functions: *supervision* of and *enforcement actions* against regulated entities, as well as more general *market monitoring*.[13] The early-stage analysis of social media content can help to flag potential problems for additional study using more traditional regulatory tools, such as requests for information and other types of market-wide information gathering. More particularly, this method can offer regulators insights into consumer populations that are less accessible through traditional mechanisms, such as consumer surveys or the CFPB's consumer complaints database. Whereas younger financial consumers, in particular, may be unlikely to file formal complaints, they may be more likely to voice their opinions—both positive as well as negative—on TikTok, often tagging videos with #fintok. In this sense, TikTok and other social media platforms are effectively modern complaint boxes.[14]

Observing the interactions of consumers and firms on social media platforms, such as TikTok, can enable regulators to gain a much fuller understanding of the behavioral debtor-consumer.[15] Increased oversight of social media platforms by consumer financial regulators could also yield indirect benefits by chilling predatory behavior of financial institutions on these platforms, such as misleading "influencing" targeted at younger consumers, as articulated more fully below.[16]

To illustrate the usefulness and mechanics of social media content analysis for consumer financial regulation, we selected the online "buy now, pay later" ("BNPL") credit market as a case study.[17] The rapid growth of the BNPL market is attracting attention from financial regulators concerned

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13. *See infra* Section IV.B.

14. We are grateful to Jay Westbrook for this formulation. This phenomenon is well understood by consumers and firms. *See e.g.*, Consumer Reports, *The Best Way To Complain to a Company on Social Media* (Aug 2, 2021) https://www.consumerreports.org/consumer-complaints/best-way-to-complain-to-a-company-on-social-media-a4380499295/ [https://perma.cc/6AK8-KGPZ]; Wayne R. Barnes, *Social Media and the Rise in Consumer Bargaining Power*, 14 U. PA. J. Bus. L. 661 (2012); Sonja Gensler, Franziska Völckner, Yuping Liu-Thompkins, Caroline Wiertz, *Managing Brands in the Social Media Environment*, 27 J. INTERACTIVE MKTG. 242 (2013).

15. *See generally* Edward J. Janger and Susan Block-Lieb, *The Myth of the Rational Borrower: Behaviorism, Rationality, and the Misguided Reform of Bankruptcy Law* 84 Tex. L. Rev. 1481 (2005–2006).

16. We are grateful to Ted Janger for this observation. *See infra* Part III.

17. *See infra* Part II.

about risks to consumers.[18] It is a paradigmatic example of regulators playing catch-up with fintech innovation. A particularly significant development is the recent growth in short-term "pay in four" products, which allow consumers to purchase and defer payment of goods and services for up to six weeks with no upfront interest. These products are especially popular among younger, Gen-Z and Millennial consumers, who typically use them to purchase low-value fashion items on online retail platforms.[19] The BNPL trend has given rise to a debt subculture on TikTok, making it especially suitable for the present study. Creators frequently discuss their experiences with BNPL products in videos posted to TikTok.[20]

To the best of our knowledge, this Essay is the first to use TikTok content analysis to inform consumer finance law, and law more generally. It is also one of the first to use social media content analysis—particularly digital ethnographic methods—to inform consumer finance law.[21] The existing

18. *See* CAL. DEP'T FIN. PROT. & INNOVATION, ANNUAL REPORT OF FINANCE LENDERS, BROKERS, AND PACE ADMINISTRATORS 2 (2022), https://dfpi.ca.gov/wp-content/uploads/sites/337/2021/10/2020-CFL-Aggregated-Annual-Report.pdf [https://perma.cc/M849-3RCF] (observing a large increase in consumer lending in 2020 due to a surge in BNPL and noting that the top six BNPL lenders accounted for over 90% of total consumer loans originating in California in 2020); FED. RSRV. BD., ECONOMIC WELL-BEING OF U.S. HOUSEHOLDS IN 2021, at 49 (2022), https://www.federalreserve.gov/publications/files/2021-report-economic-well-being-us-households-202205.pdf [https://perma.cc/M4S9-K2SD] (finding that 10% of those surveyed had used BNPL between October/November 2020 and October/November 2021); *see also* ACCENTURE & AFTERPAY, THE ECONOMIC IMPACT OF BUY NOW, PAY LATER IN THE US (2021), https://afterpay-corporate.yourcreative.com.au/wp-content/uploads/2021/10/Economic-Impact-of-BNPL-in-the-US-vF.pdf [https://perma.cc/YA6C-Z3PW] (finding that the number of BNPL users grew 300% per annum between 2018 and 2021, with 45 million active BNPL users in 2021, roughly one in every six Americans).

19. *See* FIN. TECH. ASS'N, JUST THE FACTS: BUY NOW PAY LATER (BNPL) (2021), https://www.ftassociation.org/wp-content/uploads/2021/07/BNPL-JTF-Final-3.pdf [https://perma.cc/S8VU-C3VR]; Samantha Subin, *Why Millennials and Gen-Zs are Jumping on the Buy Now, Pay Later Trend*, CNBC (Aug. 7, 2021, 9:47 AM), https://www.cnbc.com/2021/08/07/why-millennials-and-gen-zs-are-jumping-on-the-buy-now-pay-later-trend.html [https://perma.cc/SB63-K2L3].

20. *See infra* Part IIIIII.

21. There is a nascent body of empirical research using consumer data from Facebook, Google, and Twitter to inform consumer financial policy, mainly in emerging market economies. *See* Innovations for Poverty Action (IPA), *Social Media Usage By Digital Finance Consumers: Analysis of consumer complaints in Kenya, Nigeria, and Uganda. July 2019 – July 2020* (April 2021), https://www.poverty-action.org/sites/default/files/publications/Social-Media-Usage-by-Digital-Finance-Consumers-April-2021.pdf [https://perma.cc/QXC4-GQU5] (testing a "social media listening tool" on Twitter, Facebook, and Google Store to "inform potential further experimentation with consumer engagement and complaint handling via social media by regulators and civil society."); IPA, *Using Artificial Conversation (Chatbots) and Social Media Data from the Philippines to Identify Protection Issues in Digital Financial Services* (2021

consumer finance empirical legal literature has largely been confined to the use of consumer complaints data from the CFPB's consumer complaints database.[22] Previous empirical legal analyses using social media content have focused on the platforms Twitter, YouTube, Facebook, and Instagram, mainly with a view to understanding content moderation policies.[23]

Beyond the walls of legal scholarship, empirical research using social media content to study financial markets has focused on the effects of social media communication, including misinformation and confirmatory information, on stock market performance.[24] Non-legal scholars have also studied the association between investor sentiment, firms' announcements on social media, and stock market returns,[25] as well as the effects of regulators'

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ongoing), https://www.poverty-action.org/study/using-artificial-conversation-chatbots-and-social-media-data-philippines-identify-protection [https://perma.cc/GB8D-F7EZ]; Jonathan Fu and Mrinal Mishra, *Combatting Fraudulent and Predatory Fintech Apps with Machine Learning* (Feb 10, 2022), https://www.poverty-action.org/publication/combatting-fraudulent-and-predatory-fintech-apps-with-machine-learning [https://perma.cc/G5RR-P6MZ].

22. *See, e.g.*, Ian Ayres et al., *Skeletons in the Database: An Early Analysis of the CFPB's Consumer Complaints*, 19 FORDHAM J. CORP. & FIN. L. 343; Angela Littwin, *Why Process Complaints? Then and Now*, 87 TEMP. L. REV. 895, 901 (2015); Pamela Foohey, *Calling on the CFPB for Help: Telling Stories and Consumer Protection*, 7 LAW & CONTEMP. PROBS. 177 (2022); Odinet, *Consumer Bitcredit*, *supra* note 3; Matthew A. Bruckner & C.J. Ryan, *The Magic of Fintech? Insights for a Regulatory Agenda from Analyzing Student Loan Complaints Filed with the CFPB*, 127 DICKINSON L. REV. 1 (2022); Craig Cowie, *Is the CFPB Still on the Beat? The CFPB's (Non)Response to the COVID-19 Pandemic*, 82 MONT. L. REV. 41, 42, 55–56 (2021).

23. *See, e.g.*, Nick Suzor, *Understanding Content Moderation Systems: New Methods To Understand Internet Governance at Scale, over Time, and Across Platforms*, *in* COMPUTATIONAL LEGAL STUDIES: THE PROMISE AND PERILS OF DATA-DRIVEN RESEARCH 166 (Ryan Whalen ed., 2020); Therese Enarsson & Simon Lindgren, *Free Speech or Hate Speech? A Legal Analysis of the Discourse About Roma on Twitter*, 28 INFO. & COMMC'NS TECH. L. 1 (2019).

24. *See, e.g.*, Wesley R. Gray, Facebook for Finance: Why Do Investors Share Ideas via Their Social Networks? (Nov. 2, 2010) (unpublished paper), https://ssrn.com/abstract=1304271 [https://perma.cc/3Z7H-J6AM]; Hailiang Chen et al., *Wisdom of Crowds: The Value of Stock Opinions Transmitted Through Social Media*, 27 REV. FIN. STUD. 1367 (2014); J. Anthony Cookson et al., Echo Chambers (Feb. 15, 2022) (unpublished paper), https://ssrn.com/abstract=3603107 [https://perma.cc/T3DT-MXYY]; Roger S. Debreceny, *Social Media, Social Networks, and Accounting*, 29 J. INFO. SYS. 1 (2015); Lasse H. Pedersen, Game On: Social Networks and Markets (June 1, 2022) (unpublished paper), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3794616 [https://perma.cc/V53R-2KJ7]; Bryan Fong, *Analysing the Behavioural Finance Impact of 'Fake News' Phenomena on Financial Markets: A Representative Agent Model and Empirical Validation*, 7 FIN. INNOVATION 1 (2021); Kogan et al., *supra* note 10.

25. *See, e.g.*, Jim Kyung-Soo Liew & Tamás Budavári, Do Tweet Sentiments Still Predict the Stock Market? (Aug. 8, 2016) (unpublished paper), https://ssrn.com/abstract=2820269 [https://perma.cc/89F7-FVY7]; Axel Groß-Klußmann et al., *Buzzwords Build Momentum: Global Financial Twitter Sentiment and the Aggregate Stock Market*, 136 EXPERT SYS. WITH APPLICATIONS 171, 172 (2019); Olivier Kraaijeveld & Johannes De Smedt, *The Predictive Power of Public Twitter Sentiment for Forecasting Cryptocurrency Prices*, 65 J. INT'L FIN. MKTS., INSTS. & MONEY 1, 15 (2020).

communications through social media.[26] Social media sentiment analysis using automated, machine learning techniques is increasingly used by financial analysts. More broadly, empirical research using social media content has examined consumer complaints, consumer perceptions on marketing, the construction of social networks and networked audiences, collective action, and social practices such as tagging, *inter alia*.[27]

This Essay extends the focus of study to include user perceptions of, and meta-commentary on, consumer financial products as revealed by social media content and how the analysis of this content could help to elucidate consumer financial law. Furthermore, whereas trends in computational legal studies err towards quantitative methods that often leverage analysis of "big data,"[28] we incorporate an emergent stream of qualitative digital methods that center on "thick data," as a counterpoint to quantitative, big data methods.[29] Thick data follows traditions of digital ethnography to produce rich qualitative insights by following digital traces created by users online.[30]

As a secondary contribution, this Essay assists in understanding the BNPL market and its relative risks and benefits for consumers. There is a paucity of empirical evidence on the BNPL market, which is necessary for designing

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26. *See, e.g.*, Jinjie Lin, Regulating via Social Media: Deterrence Effects of the SEC's Use of Twitter (Nov. 1, 2021) (unpublished paper), https://ssrn.com/abstract=3952904 [https://perma.cc/UCX4-Q2YJ]; *Twitter Analysis: Analysis of CFPB Twitter Data (2011–2020)*, GITHUB, https://dz777.github.io/twitter-analysis/ [https://perma.cc/V9HM-5A3R].

27. *See, e.g.*, Alice E. Marwick & Danah Boyd, *I Tweet Honestly, I Tweet Passionately: Twitter Users, Context Collapse, and the Imagined Audience*, 13 NEW MEDIA & SOC'Y 114, 115 (2010); Cuauhtemoc Luna-Nevarez, *Neuromarketing, Ethics, and Regulation: An Exploratory Analysis of Consumer Opinions and Sentiment on Blogs and Social Media*, 44 J. CONSUMER POL'Y 559, 561 (2021); Alan S. Abrahams, Jian Jiao, G. Alan Wang, Weiguo Fan, *Vehicle Defect Discovery from Social Media*, 54 Decision Support Systems 87 (2012); Jack Bandy and Nicholas Diakopoulos, #Tulsaflop: A Case Study of Algorithmically-Influenced Collective Action on TikTok (Dec. 14, 2022) (unpublished paper) https://arxiv.org/pdf/2012.07716.pdf [https://perma.cc/4ER6-FV2J].

28. *See, e.g.*, James C. Phillips et al., *Corpus Linguistics & Original Public Meaning: A New Tool To Make Originalism More Empirical*, 126 YALE L.J.F. 21, 24 (2016) (describing the use of corpus linguistics for constitutional interpretation); David S. Law, *Constitutional Archetypes*, 95 TEX. L. REV. 153, 164–65 (2016) (analyzing constitutional preambles using automated content analysis tools).

29. Legal scholars have previously observed the limitations of quantitative methods. *See, e.g.*, Harry T. Edwards & Michael A. Livermore, *Pitfalls of Empirical Studies That Attempt To Understand the Factors Affecting Appellate Decisionmaking*, 58 DUKE L.J. 1895, 1907–08 (2009); Law, *supra* note 28, at 192 ("[A]utomated content analysis is no substitute for human interpretation and judgment, but it does extend human capabilities dramatically.").

30. *See* Guillaume Latzko-Toth et al., *Small Data, Thick Data: Thickening Strategies for Trace-Based Social Media Research*, *in* THE SAGE HANDBOOK OF SOCIAL MEDIA RESEARCH METHODS 199, 199 (Luke Sloan & Anabel Quan-Haase eds., 2016); James Howison et al., *Validity Issues in the Use of Social Network Analysis with Digital Trace Data*, 12 J. ASS'N FOR INFO. SYS. 767, 769 (2011).

effective regulatory interventions.[31] A few recent empirical studies have sought to fill this evidentiary gap using traditional data sources, such as credit card transaction data,[32] BNPL contract terms,[33] and consumer surveys.[34] In December 2021, the CFPB launched a market monitoring inquiry to gather more data from the largest BNPL firms.[35]

Our study reveals tentative evidence of repayment difficulties and strategic default by consumers in BNPL markets. Although these observations are not conclusive, they offer early warning signs of potential consumer protection concerns that could help guide the study and regulation of the BNPL market. Our study also confirms that younger consumers actively use TikTok to express their views on debt, finance, and consumption, including BNPL.[36] It reveals a new lexicon of consumer finance, replete with memes, hashtags, and emojis. Furthermore, it confirms that lenders are actively leveraging the benefits of social media to reach younger consumers, for example, by "commenting" on creators' TikTok videos and encouraging them to use their products.[37]

The rest of the Essay proceeds as follows. Part II introduces the case study of BNPL. Part III presents the methodology and results of our study of BNPL on TikTok using social media content analysis. Part IV discusses implications for consumer financial law. Section IV.A sets out preliminary insights from our study relevant to the regulation of the BNPL market. Section IV.B

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31. Other researchers have also acknowledged this gap. *See, e.g.*, Benedict Guttman-Kenney et al., Buy Now Pay Later . . . On Your Credit Card 2–3 (Mar. 16, 2022) (unpublished paper), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4001909 [https://perma.cc/4FFT-2AK6].

32. *See id.* at 8–10.

33. *See* JULIAN ALCAZAR & TERRI BRADFORD, FED. RSRV. BANK KANSAS CITY, THE APPEAL AND PROLIFERATION OF BUY-NOW-PAY-LATER: CONSUMER AND MERCHANT PERSPECTIVES (2021), https://www.kansascityfed.org/Payments%20Systems%20Research%20Briefings/documents/8504/psrb21alcazarbradford1110.pdf [https://perma.cc/ZE58-AC9L].

34. *See, e.g.*, FED. RSRV. BD., *supra* note 18; CONSUMER FINANCE INSTITUTE, FED. RSRV. BANK PHILADELPHIA, BUY NOW, PAY LATER: SURVEY EVIDENCE OF CONSUMER ADOPTION AND ATTITUDES (2022), https://www.philadelphiafed.org/-/media/frbp/assets/consumer-finance/discussion-papers/dp22-02.pdf [https://perma.cc/Q7GA-F2F5] (survey of 2,070 US BNPL consumers in November 2021).

35. *See Consumer Financial Protection Bureau Opens Inquiry into "Buy Now, Pay Later" Credit*, CONSUMER FIN. PROT. BUREAU (Dec. 16, 2021), [hereinafter *CFPB Inquiry*] https://www.consumerfinance.gov/about-us/newsroom/consumer-financial-protection-bureau-opens-inquiry-into-buy-now-pay-later-credit/ [https://perma.cc/X6DY-G395].

36. This trend has recently been observed in popular media. *See* Joshua Bote, *Buy Now, Pay Later Is Sending the TikTok Generation Spiraling into Debt, Popularized by San Francisco Tech Firms*, SFGATE (June 9, 2022, 2:26PM), https://www.sfgate.com/news/article/influencers-lead-Gen-Z-into-debt-17142294.php [https://perma.cc/G5BH-88R2].

37. For a detailed discussion of our results, see *infra* Section III.I.A.

examines the implications of social media content analysis as a new regulatory tool for consumer financial law. Part V concludes.

II. CASE STUDY: BUY NOW, PAY LATER AND CONSUMER RISKS

BNPL credit products have been around for a while and share many similarities with installment loans, credit cards, lease financing, and layaway plans.[38] In recent years, there has been rapid growth in short-term, online "pay in four" BNPL products.[39] This new generation of BNPL allows consumers to repay in four equal installments over six weeks, with no upfront interest. In a sign of the growing popularity of BNPL, Apple recently launched its own product, "Apple Pay Later."[40] It joins an increasingly crowded market that includes fintech lenders, such as Klarna,[41] Affirm,[42] Paypal,[43] and Afterpay,[44] as well as traditional credit companies, such as CapitalOne.[45]

BNPL has been touted as a cheaper, safer, and more convenient alternative to other forms of high-cost credit, particularly for low-income, low-FICO score consumers.[46] BNPL can also benefit merchants by

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38. *See Rent-to-Own, Lease-to-Own, Layaway, and Buying over Time*, FED. TRADE COMM'N (May 2021), https://consumer.ftc.gov/articles/rent-own-lease-own-layaway-and-buying-over-time [https://perma.cc/XQS2-UBAF]. Unlike layaway, BNPL allows consumers to access goods or services before making payment in full. *Id. See also* FED. RSRV. BANK PHILADELPHIA, *supra* note 34, at 3–5 (discussing the problem of "definition creep" due to the broad use of the term BNPL).

39. *See* CAL. DEP'T FIN. PROT. & INNOVATION, *supra* note 18, at 2.

40. *See* Ted Rossman et al., *Apple Joins Buy Now, Pay Later Craze with Apple Pay Later*, BANKRATE (June 10, 2022), https://www.bankrate.com/finance/credit-cards/apple-pay-later/ [https://perma.cc/YK2E-VMWM].

41. *See Pay in 4.*, KLARNA, https://www.klarna.com/us/pay-in-4/ [https://perma.cc/F3T4-QHM8].

42. *See Buy Now, Pay Later Without the Fees*, AFFIRM, https://www.affirm.com/how-it-works [https://perma.cc/F72Z-CCU9]. Affirm went public in January 2021. *See* Affirm Holdings, Inc., Registration Statement Under the Securities Act of 1933 (Form S-1) (Jan. 11, 2021), [hereinafter Affirm Form S-1] https://www.sec.gov/Archives/edgar/data/1820953/000110465921002724/tm2026663-17_s1a.htm [https://perma.cc/MCY2-H4P8].

43. *See Buy What You Love Now, Pay Later*, PAYPAL, https://www.paypal.com/us/digital-wallet/ways-to-pay/buy-now-pay-later [https://perma.cc/H8Z2-C3HA].

44. *See* AFTERPAY, https://www.afterpay.com/en-US [https://perma.cc/QDL7-N52Q].

45. *See* CAPITALONE FLEX PAY, https://flexpay.capitalone.com/ [https://perma.cc/2V2G-M9AQ].

46. *See e.g.*, Affirm Form S-1, *supra* note 42, at 1 ("Legacy payment options, archaic systems, and traditional risk and credit underwriting models can be harmful, deceptive, and restrictive to both consumers and merchants."); Alcazar & Bradford, *supra* note 33 (finding that

increasing sales.[47] At their core, BNPL transactions implicate a tripartite transaction between the consumer, the merchant, and the BNPL lender. The BNPL lender charges the merchant a transaction fee every time a customer makes a purchase using BNPL.

However, the rapid expansion of BNPL is also raising questions about potential harm to consumers, particularly with regard to pay in four products, their growing popularity among younger, lower-income, and racial minority consumers, and their ill-fitting coverage under consumer credit laws.[48] A key consumer protection concern is hidden fees. Regulators have voiced concern that consumers are being misled by the promise of interest-free credit,[49] as BNPL lenders place heavy marketing emphasis on the fact that their products

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no-interest, no-fee BNPL products are cheaper than credit cards or layaway plans, but longer-term, interest-bearing BNPL products are comparatively more expensive).

47. *See Buy Now, Pay Later: Five Business Models To Compete*, MCKINSEY & CO. (July 29, 2021), https://mck.co/3mViN0b [https://perma.cc/XG6F-R9ZQ] (noting that BNPL allows merchants to "enhance cart conversion, increase average order value, and attract new, younger consumers to the merchants' platforms"); *CFPB Inquiry*, *supra* note 35 ("Merchants are adopting BNPL programs and are willing to typically pay 3 percent to 6 percent of the purchase price to the companies, similar to credit card interchange fees, because consumers often buy more and spend more with BNPL.").

48. *See* FED. RSRV. BANK PHILADELPHIA, *supra* note 34, 6–7 ("BNPL users are generally lower earning, younger, non-White, and more likely to be employed (within our respondent population, there was no difference in usage rates between genders for any of the products)."). Recent downward macroeconomic trends, combined with increased scrutiny from regulators, are also casting doubt on the sustainability of the BNPL business model. *See* Elaine S. Povich, *Regulators Scrutinize Buy Now, Pay Later Plans*, PEW (Feb. 2, 2022), https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2022/02/02/regulators-scrutinize-buy-now-pay-later-plans [https://perma.cc/H4DJ-R2DX].

49. *See* Nelson Akeredolu et al., *Should You Buy Now and Pay Later?*, CONSUMER FIN. PROT. BUREAU (July 6, 2021), https://www.consumerfinance.gov/about-us/blog/should-you-buy-now-and-pay-later/ [https://perma.cc/4ADM-FE8E]; *CFPB Inquiry*, *supra* note 35 (announcing the CFPB's market monitoring inquiry into BNPL and noting that "[t]he CFPB is concerned about accumulating debt, regulatory arbitrage, and data harvesting in a consumer credit market already quickly changing with technology"); Andrew Braden, *Know Before You Buy (Now, Pay Later) This Holiday Season*, CONSUMER FIN. PROT. BUREAU (Dec. 16, 2021), https://www.consumerfinance.gov/about-us/blog/know-before-you-buy-now-pay-later-this-holiday-season/ [https://perma.cc/CD8E-QMLM]; Ashwin Vasan, *Our Public Inquiry on Buy Now, Pay Later*, CONSUMER FIN. PROT. BUREAU (Jan. 12, 2022), https://www.consumerfinance.gov/about-us/blog/our-public-inquiry-buy-now-pay-later/ [https://perma.cc/2KP8-GWSN] ("For some people, BNPL could look like a standard payment method when they are really taking on a new form of debt."). These concerns and regulatory inquiries are not confined to the US. *See* John Adams, *How Regulators Worldwide Aim To Rein in Buy Now/Pay Later*, AM. BANKER (Nov. 4, 2021), https://www.americanbanker.com/payments/list/how-regulators-worldwide-aim-to-rein-in-buy-now-pay-later [https://perma.cc/4NH2-HVD8].

are "interest free."[50] For example, Klarna states in bold on its website that there is "[n]o interest. [e]ver" on its pay in four product.[51] This claim could be misleading given that consumers can still be charged late fees if they do not repay on time. The Klarna website states, in noticeably smaller print, "[a]nd, no fees when you pay on time."[52] In even smaller print further down the page, the website clarifies that where Klarna is unable to collect the debt, a late payment fee of $7 will be added.[53]

Clearly, if payment of late fees is routine, the promise of zero percent interest is, in practice, merely illusory. In turn, consumers may be underestimating the actual costs of BNPL and incurring unaffordable debts. Although more data is needed on the incidence of fees in BNPL transactions, early evidence gives cause for concern.[54] BNPL lenders QuadPay, Sezzle, and Afterpay were ordered to refund consumers $1.9 million in delinquent and related fees before these companies could receive licenses to operate in the state of California.[55] The Federal Reserve Board's recent Economic Well-being of US Households survey found that "15% of people who had used BNPL in the prior 12 months were late making a payment."[56] This proportion was notably higher among people with low incomes, lower self-reported credit ratings, and those who would not have been able to afford their

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50. *See* Nathalie Martin & Lydia Pizzonia, *Shadow Credit and the Devolution of Consumer Credit Regulation*, 24 LEWIS & CLARK L. REV. 1439, 1450 (2020).

51. *See* KLARNA, *supra* note 41.

52. *Id*.

53. While most BNPL contracts include late payment fees, some lenders have stated that they do not charge these fees in practice—making their "interest free" claims less misleading. *See, e.g.*, *Why Affirm?*, AFFIRM, https://www.affirm.com/how-it-works/why-affirm [https://perma.cc/3W7Y-U3D2] ("We never charge fees. You'll never pay late fees. Or annual fees. Or hey-it's-a-random-day-in-April fees."); Affirm Form S-1, *supra* note 42, at 1; *see also* FIN. TECH. ASS'N, *supra* note 19 ("Given higher conversion rates and resulting increased sales from consumers' preference for BNPL, merchants offering BNPL payment solutions typically pay a fee to the BNPL provider, none of which is passed along to the consumer.").

54. As Martin and Pizzonia observe, *supra* note 50, at 8, "[o]n a small purchase, these fees represent thousands of percentage points per annum if stated as interest rates."

55. *See* CTR. FOR RESPONSIBLE LENDING ET AL., NOTICE AND REQUEST FOR COMMENT REGARDING THE CFPB'S INQUIRY INTO BUY-NOW-PAY-LATER (BNPL) PROVIDERS 8 (2022), https://consumerfed.org/wp-content/uploads/2022/03/Joint-BNPL-comments-3.25.22.pdf [https://perma.cc/8EGE-BH7F].

56. FED. RSRV. BD., *supra* note 18, at 51. This compares to an average delinquency rate on credit card loans of c. 1.5 to 2% during the same period (Q3 2020–Q3 2021). *See also* FED. RSRV. BANK PHILADELPHIA, *supra* note 34, at 11 (finding that, of 2,070 US consumers of short-term BNPL products, 10.7% of respondents were late making payment).

purchase without BNPL.[57] In Australia and the UK, data indicates that a considerable portion of BNPL companies' revenue comes from late fees.[58]

Relatedly, there is concern about a lack of proper underwriting by BNPL companies. On the one hand, the link between borrowed funds and a specific use means that BNPL could present a lower risk to lenders compared to certain other forms of all-purpose unsecured credit.[59] Citing the unreliability of traditional bureau data, some of the larger BNPL lenders such as Klarna and Affirm have asserted that not only do they underwrite individual transactions, they carry out (more) detailed credit checks using alternative data.[60]

On the other hand, early evidence suggests that BNPL credit may often be extended to those who are unable to make successful repayment.[61] For example, surveys have reported a high incidence of bank overdrafts among BNPL users, twice the rate of consumers who do not use BNPL.[62] The Federal Reserve Board's recent survey of household finances found that over

57. FED. RSRV. BD., *supra* note 18, at 51 tbl.14. Note that the definition of BNPL for the purposes of this survey is broad and includes both longer term (interest-bearing) as well as shorter term (non-interest bearing, "pay in four") products. FED. RSRV. BD., *supra* note 18, at 51. *See also* FED. RSRV. BANK PHILADELPHIA, *supra* note 34, at 11 ("The groups that reported the most difficulty with payments were heavy users (14.7 percent), those earning less than $40,000 (15.3 percent), and 18- to 35-year-olds (13.8 percent).").

58. *See* CTR. FOR RESPONSIBLE LENDING ET AL., *supra* note 55, at 8.

59. *See* Giuseppe Bertola et al., *The Economics of Consumer Credit Demand and Supply*, *in* THE ECONOMICS OF CONSUMER CREDIT 1, 15 (Giuseppe Bertola et al. eds., 2006) ("[I]nstallment plans for certain durable goods purchases may be safer than cash loans from the point of view of lenders, even when they are not backed by housing or vehicle collateral, because a direct link of borrowed funds to a specific use offers valuable information to lenders.").

60. *See Estimating Creditworthiness for Consumers with Limited Credit History*, AFFIRM (Dec. 12, 2018), https://www.affirm.com/business/blog/alternative-underwriting [https://perma.cc/PBL5-RP6W]; *Does Klarna Perform a Credit Check?*, KLARNA, https://www.klarna.com/us/customer-service/klarna-perform-credit-check/ [https://perma.cc/7ZSQ-TN3T]; Jared Simons, *Affirm: The Tesla of Finance*, SEEKING ALPHA (May 10, 2022), https://seekingalpha.com/article/4507418-affirm-the-tesla-of-finance [https://perma.cc/SR96-W4UP] ("Affirm underwrites each transaction and extends credit based on the specific item a consumer purchases as well specific transactional and alternative data from the consumer.").

61. *See* Matt Schulz, *42% of Buy Now, Pay Later Users Have Made a Late Payment*, LENDINGTREE (Apr. 18, 2022), https://www.lendingtree.com/personal/bnpl-survey/ [https://perma.cc/5XUK-GCML] (describing BNPL as "a gateway to overspending for many consumers" and finding that "[n]early 70% of BNPL users report spending more than they would have if they had to pay upfront").

62. *See* Claire Williams, *'Buy Now, Pay Later' Users Significantly More Likely To Overdraft than Nonusers*, MORNING CONSULT (Mar. 2, 2022), https://morningconsult.com/2022/03/02/buy-now-pay-later-bnpl-overdraft-data/ [https://perma.cc/TVU8-94WE].

half of respondents used BNPL because "it was the only way they could afford their purchase."[63]

The frictionless integration of BNPL credit options into digital retail platforms,[64] "easy-to-use apps," web browser plugins,[65] and the seductive marketing used by BNPL lenders,[66] collectively make it easier for consumers to take on unaffordable debt. BNPL lenders are leveraging the affordances of technology, data, and social media platforms such as TikTok to target younger, female, and ethnic minority consumers.[67] For example, Klarna has

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63. *See* FED. RSRV. BD., *supra note* 18, at 50. This reason was significantly more prevalent among low-income (60%) than high-income individuals (25%), as well as among those with low credit ratings. *Id.*; *see also* FED. RSRV. BANK PHILADELPHIA, *supra* note 34, 8–9 (finding that a combined 32.7 per cent of respondents cited either "inability to get approved for credit" or "lack of credit" as reasons for choosing BNPL, with LMI groups more likely to cite these reasons as compared to high-income groups; overall, though, these reasons were significantly less cited than convenience, size of purchase, and ability to manage finances); Guttman-Kenney et al., *supra* note 31, at 10 (finding that nearly one in five BNPL transactions in the UK are charged to credit cards); Maurie Backman, *Study: Buy Now, Pay Later Services Continue Explosive Growth*, MOTLEY FOOL (Mar. 21, 2021), https://www.fool.com/the-ascent/research/buy-now-pay-later-statistics/ [https://perma.cc/TBL9-RCXR] (finding that the most common reason to use buy now, pay later services is to make purchases that do not fit in one's budget—45% of respondents have used it for this reason).

64. On the frictionless user experience as a driver of Fintech innovation, see Mark Fenwick & Erik P.M. Vermeulen, *Fintech, Overcoming Friction and New Models of Financial Regulation*, *in* REGULATING FINTECH IN ASIA, GLOBAL CONTEXT LOCAL PERSPECTIVES 205, 207 (Mark Fenwick et al. eds., 2020) ("[M]uch of the distinctiveness of fintech derives from the leveraging of the unique properties of digital technologies by non-traditional actors to overcome friction in the user experience of banking and other financial services."). *See also* Packin, *supra* note 11, at 24 ("[T]o many young, first-time investors, using digital apps that are frictionless and highly gamified seems easy and fun, in reality, the stock market is likely the toughest place to earn easy money, and losing money is anything but fun."); Langvardt & Tierney, *supra* note 11, at 1–2 ("Flashy graphics and frictionless trading have made it easier—and perhaps more fun—than ever before for ordinary people to trade stocks."). For a broader treatment of friction and the design of digital systems, see Paul Ohm & Jonathan Frankle, *Desirable Inefficiency*, 70 FLA. L. REV. 777, 782 (2018) (analyzing "desirable inefficiency" as a design principle for promoting non-efficiency values).

65. *See CFPB Inquiry*, *supra* note 35.

66. *See, e.g.*, *How Klarna Created a Global Marketing Campaign with A$AP Rocky*, KLARNA (Jan. 24, 2022), https://www.klarna.com/us/blog/how-klarna-created-a-global-marketing-campaign-with-aap-rocky/ [https://perma.cc/Q8TC-U3R7] (describing Klarna's online social media marketing campaign featuring the popular musician A$AP Rocky).

67. *See* Rosie Bradbury, *Apple's Buy-Now-Pay-Later Rival to AfterPay. A Lawyer Who Helps Victims of Predatory Lending Says Apple Could Use the Data It Has on You To Push Reckless Spending*, BUS. INSIDER (June 11, 2022), https://www.businessinsider.com/apple-user-data-overspending-apple-pay-later-2022-6 [https://perma.cc/Q55Q-XCK8] (statement of Nadine Chabrier, Senior Counsel for Center for Responsible Lending) ("Some of the marketing materials I've seen from buy now, pay later are targeted towards younger and younger consumers, people of color, Black and Latino consumers."); *CFPB Inquiry*, *supra* note 35 (citing risks to consumers due to "data monetization" and "behavioral targeting").

enlisted "Smoooth Dogg" (the artist otherwise known as Snoop Dogg) to promote its "Smoooth" payments brand, including through advertising and influencing on TikTok.[68] The company uses slang in its promotional materials,[69] operates a reward program called "Vibes,"[70] and tracks merchants' checkout rates using "emo language."[71]

An additional consumer protection concern is cumulative BNPL use. As a result of using multiple BNPL products, often from different lenders, consumers may be at increased risk of losing track of payments.[72] Lenders may also lack a comprehensive overview of a consumer's ability to pay, although the recent introduction of centralized credit reporting for BNPL could ameliorate this concern, as discussed further below.[73] Presently, there is no readily available way to understand the use of these BNPL products across multiple platforms at the same time.

A further set of consumer protection concerns relates to the multi-party structure of BNPL transactions.[74] Consumers have complained that they are still charged by BNPL companies when retail orders are returned or cancelled, when products are listed as backordered, and in other situations where the consumer does not receive the good or service they originally purchased—even when the consumer no longer wishes to receive it.[75] Due to the tri-partite transaction structure, the BNPL company will only reimburse the consumer once the merchant has reimbursed the BNPL company.[76] In

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68. *See Klarna Launches "Smoooth" Brand*, Klarna (Aug. 29, 2017) https://www.klarna.com/international/press/klarna-launches-smoooth-brand/ [https://perma.cc/9XS2-74MF]; *Smoooth Dogg and Klarna Release Unique Collection*, Klarna (Mar. 5, 2019), https://www.klarna.com/international/press/smoooth-dogg-and-klarna-release-unique-collection/ [https://perma.cc/5DNM-4HVJ].

69. *See, e.g.*, AJ Coyne, *Klarna Marketing, from the Inside with AJ Coyne*, KLARNA (Dec. 1, 2020), https://www.klarna.com/uk/blog/klarna-marketing-from-the-inside-with-aj-coyne/ [https://perma.cc/9MEV-CQGF].

70. *Klarna's Rewards Club Vibe Surpasses 2 Million US Members*, KLARNA (Oct. 7, 2021), https://www.klarna.com/us/blog/klarnas-rewards-club-vibe-surpasses-2-million-us-members/ [https://perma.cc/7NTY-53K8].

71. *See* KLARNA DEEP DIVE, KLARNA 3 (n.d.), https://www.klarna.com/assets/sites/2/2020/01/21085652/klarna-deep-dive.pdf [https://perma.cc/QS7J-33S2].

72. *See CFPB Inquiry*, *supra* note 35 ("If a consumer has multiple purchases on multiple schedules with multiple companies, it may be hard to keep track of when payments are scheduled.").

73. *See infra* note 78 and accompanying text.

74. *See* CTR. FOR RESPONSIBLE LENDING ET AL., *supra* note 55, at 4–5; ED MIERZWINSKI & MIKE LITT, U.S. PIRG EDUC. FUND, THE HIDDEN COSTS OF "BUY NOW, PAY LATER" 10, 12–14 (2022) (narrating consumer experiences with billing problems between the consumer, BNPL company, and third-party merchant).

75. *See* MIERZWINSKI & LITT, *supra* note 74, at 10, 12–14.

76. *See* CTR. FOR RESPONSIBLE LENDING ET AL., *supra* note 55, at 15.

practice, this means that consumers can end up in a holding pattern, having paid or else being called upon to pay for the item they returned or did not receive, while waiting for the merchant and the BNPL company to coordinate a resolution.[77]

There are also consumer protection concerns due to the impact of BNPL on consumers' credit scores. Notably, as BNPL loans are treated as separate short-term loans, rather than open-ended credit, the opening and closing of multiple BNPL accounts—in addition to payment arrears and defaults—risk tarnishing consumers' credit scores.[78] Of course, BNPL credit reporting could also help low-income, low-FICO score, and "credit invisible" consumers build a credit history and improve their credit scores, provided that they repay on time.[79] A further consumer protection concern relates to the use of consumer data. As with other fintech "super apps,"[80] many BNPL lenders are using their customers' payment and credit data to cross-sell products and services.[81]

In light of these and other consumer protection risks, regulators have recently begun to contemplate stricter regulation of the BNPL market. Currently, pay in four BNPL products fall outside the scope of application of the Truth in Lending Act ("TILA"), and associated consumer protections, as they are repayable in four installments or less and carry no "finance charge"

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77. *See Do I Have To Pay Off a Buy Now, Pay Later (BNPL) Loan If I Want To Return My Purchase?*, CONSUMER FIN. PROT. BUREAU (Dec. 2, 2021), https://www.consumerfinance.gov/ask-cfpb/do-i-have-to-pay-off-a-buy-now-pay-later-bnpl-loan-if-i-want-to-return-my-purchase-en-2115/ [https://perma.cc/7PUL-PW8J].

78. *See* CTR. FOR RESPONSIBLE LENDING ET AL., *supra* note 55, at 4. In 2022, the three major credit bureaus—Experian, Equifax, and Transunion—introduced specific tradelines for pay in four BNPL. *See, e.g.*, Greg Wright, *Introducing the Buy Now Pay Later Bureau™ from Experian*, EXPERIAN (Jan. 26, 2022), https://www.experian.com/blogs/news/2022/01/26/buy-now-pay-later-bureau/ [https://perma.cc/M3DD-SWJB] (announcing a specialty Buy Now Pay Later Bureau, but noting that "[t]o protect consumer credit scores from immediate negative impact, detailed information related to each BNPL transaction will be stored separately from Experian's core credit bureau data").

79. *See 'Buy Now, Pay Later' Credit Reporting*, EQUIFAX (May 9, 2022), https://www.equifax.com/newsroom/all-news/-/story/-buy-now-pay-later-credit-reporting/ [https://perma.cc/2BA2-YGDH] ("An Equifax study of anonymized consumer data from a BNPL provider shows that individuals who pay their BNPL loans on time could potentially increase their FICO® Score—helping consumers to both build and rebuild credit.").

80. CONSUMER FIN. PROT. BUREAU, THE CONVERGENCE OF PAYMENTS AND COMMERCE: IMPLICATIONS FOR CONSUMERS 9–13 (2022), https://files.consumerfinance.gov/f/documents/cfpb_convergence-payments-commerce-implications-consumers_report_2022-08.pdf [https://perma.cc/YXA6-NKGJ].

81. *CFPB Inquiry*, *supra* note 35 ("BNPL lenders have access to the valuable payment histories of their customers. Some have used this collected data to create closed loop shopping apps with partner merchants, pushing specific brands and products, often geared toward younger audiences.").

due to zero interest.[82] However, if payment of late fees and penalties is routine,[83] these fees could qualify as finance charges and bring pay in four products within the scope of TILA.[84]

Beyond TILA, pay in four products are credit products for the purposes of most other consumer credit laws, including the Consumer Financial Protection Act, Equal Credit Opportunity Act, the Fair Debt Collection Practices Act, and the Fair Credit Reporting Act.[85] As such, they should be subject to requirements under these laws. However, the design and promotion of BNPL as "payment services," rather than credit products, has created ambiguity about the application of these laws.[86]

From a policy perspective, state[87] and federal regulators[88] are concerned that sufficient self-policing of the BNPL market may not be possible, particularly if consumers lack an adequate understanding of these products and their alternatives in order to make fully informed decisions about engaging in a BNPL transaction.[89] And to the extent that BNPL products are functionally equivalent to traditional, regulated credit products, their

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82. *See* Adam Levitin, *What Is "Credit"? Afterpay, Earnin', and ISAs*, CREDIT SLIPS, (July 16, 2019, 2:23 PM), https://www.creditslips.org/creditslips/2019/07/what-is-credit-afterpay-earnin-and-isas.html#more [https://perma.cc/9CEF-SJEZ]. In contrast, longer-term, interest-bearing BNPL credit products fall within the scope of TILA.

83. *See supra* note 54 and accompanying text.

84. *See* Truth in Lending (Regulation Z), 12 C.F.R. § 1026.4(c)(2) (2022) (requiring that fees be for "actual unanticipated late payment" to be exempt from the "finance charge" definition); Levitin, *supra* note 82 ("Of course, if most consumers are paying late, then Afterpay's late fee would be a finance charge, so it would be a creditor, extending credit and subject to TILA. (I have no reason to believe that this is the case).").

85. *See* Levitin, *supra* note 82 ("[E]ven though Afterpay is not subject to TILA, it is still subject to ECOA, FCRA, FDCPA, and the Consumer Financial Protection Act.").

86. *See* Martin & Pizzonia, *supra* note 50, at 1450 (describing pay in four products as an example of "shadow credit," or an intentional effort to arbitrage traditional consumer credit regulation); *CFPB Inquiry*, *supra* note 35 (discussing concerns about regulatory arbitrage because "[s]ome BNPL companies may not be adequately evaluating what consumer protection laws apply to their products").

87. *See* Povich, *supra* note 48 (describing state-level regulation of and action toward BNPL markets in California, Oregon, and Massachusetts).

88. *See CFPB Inquiry*, *supra* note 35.

89. Press Release, Rob Bonta, Attorney General, State of California Department of Justice, Attorney General Bonta: CFPB Should Scrutinize Buy-Now-Pay-Later Financing To Address Compliance with Consumer Protection Laws (Mar. 25, 2022), https://oag.ca.gov/news/press-releases/attorney-general-bonta-cfpb-should-scrutinize-buy-now-pay-later-financing [https://perma.cc/7J3T-QXCP] ("[T]he coalition is concerned that this largely-unregulated financial product may instead trap vulnerable consumers into debt they are unable to afford and cause long-term damage to consumers' financial health."); *CFPB Inquiry*, *supra* note 35.

exemption from consumer credit laws amounts to inefficient and unsafe regulatory arbitrage.[90]

III. FINTOK ANALYSIS: METHODOLOGY AND RESULTS

This section describes the methodology and results of using social media content analysis to study the BNPL market. To circumscribe the scope of inquiry, we focus on one BNPL company, the Swedish fintech Klarna. Klarna is one of the largest BNPL lenders in the United States.[91] It also has a stronger presence on TikTok than several of its competitors, leveraging the affordances of TikTok to attract Gen-Z and Millennial creator-consumers.[92] Likewise, we focus on one social media platform, TikTok. As noted earlier, the BNPL trend has given rise to a debt subculture on TikTok, making it an especially suitable platform for study.

To investigate the consumer protection risks of BNPL, we conducted a qualitative analysis of TikTok videos in which users share their experiences with Klarna's BNPL products. We collected data manually using the TikTok mobile interface for Android in February 2022 and the search term "#Klarna." To reduce algorithmic bias, data collection was limited to "hashtag" search results. The top 300 video search results returned were saved as URLs for qualitative coding. All videos collected were published

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90. *See* Martin & Pizzonia, *supra* note 50, at 1485 (arguing that the cost of shadow credit created by markets like BNPL "could be significant"); *CFPB Inquiry*, *supra* note 35 ("The CFPB is concerned about accumulating debt, regulatory arbitrage, and data harvesting in a consumer credit market already quickly changing with technology."); Press Release, Rob Bonta, *supra* note 89; Letter from David Pommerehn, General Counsel, Consumer Bankers Ass'n, to Rohit Chopra, Director, Consumer Fin. Prot. Bureau (Mar. 25, 2022), https://www.consumerbankers.com/cba-issues/comment-letters/cba-comment-letter-bnpl-rfi [https://perma.cc/42YP-AXMU] ("[M]omentum is building for policymakers to institute a level regulatory playing field and ensure all consumers are protected in the BNPL marketplace, whether they choose a fintech or bank to meet their financial needs.").

91. *See* Ryan Browne, *$46 Billion Fintech Klarna Sees Losses Quadruple amid Surging Demand for Buy Now, Pay Later*, CNBC (Nov. 26, 2021, 8:23 AM), https://cnb.cx/39BCG9J [https://perma.cc/EAD9-D86Y] (citing data from Yipit showing that Klarna has the third largest share of the U.S. BNPL market, after Affirm and Afterpay/Square).

92. *See* KLARNA, *supra* note 41. In July 2022, Klarna's verified TikTok account had over 139k followers. *See* Klarna, TIKTOK, https://www.tiktok.com/@klarna [https://perma.cc/P2KE-53DG]. It had seventy-three thousand followers in June 2022, representing a doubling of its follower count in just one month. In comparison, the verified Affirm account had only nine hundred followers in July 2022. *See* Affirm, TIKTOK, https://www.tiktok.com/@affirm [https://perma.cc/69WS-T2KH].

between January 2020 and February 2022. For practical reasons, non-English language videos were excluded.[93]

We input all video URLs into a custom coding interface to log engagement data (likes, shares, comments), date of publication, account verification status, additional hashtags, text (on screen and video captions), relevant quotes, and research notes to develop a codebook for content analysis. Content analysis proceeded in two phases. In the first phase, two authors selected a random sample of twenty videos as pilot data to develop a codebook. Following a grounded approach to qualitative analysis,[94] we separately viewed and analyzed the videos in our pilot sample to establish a set of initial themes and then met collectively to discuss, combine, and reconcile thematic codes.[95] This yielded the following coding fields, which we added to our coding interface: geography, product(s), qualitative sentiment, and video themes.

We coded geography using contextual indicators such as currency, regional accent, and user profile. Products referred to any commercial goods that were mentioned, depicted on screen, advertised, or included in captions or hashtags. Qualitative sentiment referred to the video creators' overall sentiment towards Klarna or BNPL. We coded sentiment as "positive," "negative," or "mixed" based on language used, text, and subtext. We defined positive videos as those in which creators displayed a predominantly positive sentiment towards BNPL by primarily expressing approval of BNPL or encouraging others to use it. Negative videos were those in which creators displayed a predominantly negative sentiment towards BNPL by primarily expressing disapproval of BNPL or discouraging others from using it. Mixed videos were those in which creators shared both positive and negative opinions about BNPL or had no discernible sentiment towards BNPL.

The four video themes that emerged were: "meme," "lifestyle," "promotional," and "advisory". We defined these themes as mutually exclusive as follows: Memes (highly spreadable and replicable videos, often depicting humorous or sardonic content); Lifestyle (videos in which creators

93. These videos constituted six percent of the total sample and included videos in which the creator was non-English speaking (e.g., German or Norwegian) unless the on-screen text and captions were in English such that it could be interpreted for the purposes of this study.

94. *See generally* KATHY CHARMAZ, CONSTRUCTING GROUNDED THEORY: A PRACTICAL GUIDE THROUGH QUALITATIVE ANALYSIS (2006); JULIET M. CORBIN & ANSELM L. STRAUSS, BASICS OF QUALITATIVE RESEARCH: TECHNIQUES AND PROCEDURES FOR DEVELOPING GROUNDED THEORY (4th ed. 2015).

95. This method follows the best practices as recommended for qualitative data analysis under the grounded theory. For a discussion of these practices, see Nora McDonald et al., *Reliability and Inter-Rater Reliability in Qualitative Research: Norms and Guidelines for CSCW and HCI Practice*, PROC. ACM ON HUM.-COMPUT. INTERACTION, Nov. 2019.

discussed, criticized, or celebrated purchases made using BNPL); Promotional (videos in which creators advertised products that could be purchased using BNPL services or advertised the BNPL products themselves); and Advisory (videos in which creators provided information or cautioned viewers about using BNPL products).

In the second phase of content analysis, we analyzed the full sample of videos using the coding interface with the added qualitative themes. We first coded a sample of twenty randomly selected videos to measure the intercoder reliability of our qualitative constructs between the two coding authors. A satisfactory intercoder reliability was calculated using Cronbach's alpha for video themes ($\alpha = .825$) and sentiment ($\alpha = .762$). We then independently coded the sample until we reached conceptual saturation.[96] Our final coded sample included one hundred and seventy-five (n = 175) videos.

Our dataset comprises publicly available information and was stored as re-identifiable. We downloaded the videos in our final coded sample, together with screenshots of the video text and comments, and stored them in a secure site. However, we are cautious to protect the privacy of individual creators in discussing and presenting the results of our study below. This approach facilitates replicability of our results while still respecting the privacy interests of the individual creators in our sample.[97]

Before discussing the results, two further observations about our approach to social media content analysis bear mentioning. First, we took an intentionally broad, bottom-up approach to developing the codebook for analysis. This approach was informed by the relative novelty of the BNPL market. Despite the concerns about BNPL that have been voiced by regulators, as discussed earlier, the risks to consumers due to BNPL are still nascent and emerging. In this context, we were interested to collect as much information as possible from our sample and avoid excluding potentially useful information through an overly narrow codebook. However, in more mature markets in which the risks to consumers are well established and better-understood (including, at a later stage, the BNPL market), one could

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96. *See* JOHN W. CRESWELL, QUALITATIVE INQUIRY AND RESEARCH DESIGN: CHOOSING AMONG FIVE TRADITIONS 56–57 (1998) (defining saturation as finding "information that continues to add until no more can be found").

97. On replicability in empirical legal research, see Jason M. Chin & Kathryn Zeiler, *Replicability in Empirical Legal Research*, 17 ANN. REV. L. & SOC. SCI. 239 (2021). It is insufficient to rely on video URLs. Creators often delete TikTok content (this is true of social media content more generally). TikTok creators also often switch from public to private account mode (again, a more general social media phenomenon). Furthermore, TikTok occasionally changes the format of its video URLs. However, for ethical and privacy reasons, we opted not to permalink the video URLs or archive them (for example, using the Wayback Machine), which would create a permanent record of the videos.

imagine coding the dataset for more specific risks that regulators are interested in—such as "credit reporting errors" or "payment difficulties"—or specific hashtags such as "#missedpayment," as explored further below.[98]

Second, and relatedly, we coded our data manually. Manual data analysis was especially suited to this study given the contextual nature of audiovisual data on TikTok and the themes under examination, particularly user sentiment.[99] In this case, we could not run an automated textual analysis without first transcribing the videos in our sample. Among other things, this is because the vast majority of videos in our dataset used "audio memes"—snippets of music or re-used audio from another creator that would make no sense if divorced from the memetic context in which they were used.[100] However, automated analysis could become more feasible once the risks due to BNPL are better understood, as examined further in Part IV.

Our analysis of this dataset produced the following results. In terms of the geographical distribution of the videos, the majority of the videos for which geography could be ascertained were from the United States (33.7%) and the United Kingdom (41.1%).[101] A small number of videos (5.7%) were from creators in other countries (Germany, Ireland, Turkey, and the Netherlands). The geography could not be ascertained for 19.4% of the sample (based on our contextual markers of currency, language, and user profile).

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98. Akin to the issue-based categorization of consumer complaints is the CFPB's consumer complaints database. *See Consumer Complaint Database*, CONSUMER FIN. PROT. BUREAU, https://perma.cc/EE8E-Q6AV (last visited Jan 28, 2023).

99. For examples of consumer financial law scholarship using manual data coding, see Foohey, *supra* note 22; Odinet, *Consumer BitCredit*, *supra* note 3; Bruckner & Ryan, *supra* note 22; Robert M. Lawless et al., *Did Bankruptcy Reform Fail? An Empirical Study of Consumer Debtors*, 82 AM. BANKR. L.J. 349 (2008) (coding data from the Consumer Bankruptcy Project to study the effects of changes in bankruptcy law on the profile of bankruptcy applicants). For examples from other legal contexts, see Stephen Clowney, *An Empirical Look at Churches in the Zoning Process*, 116 YALE L.J. 859 (2007) (coding zoning exemption applications); Richard M. Re, *Beyond the Marks Rule*, 132 HARV. L. REV. 1943, 1946 (2019) (coding judgments to produce descriptive statistics about precedent formation); Matthew Jennejohn et al., *Contractual Evolution*, 89 U. CHI. L. REV. 901 (2022) (studying the evolution of contract terms by hand coding and labelling a dataset of merger agreements).

100. *See* Crystal Abidin & Bondy Kaye, *Audio Memes, Earworms, and Templatability: The 'Aural Turn' of Memes on Tiktok*, *in* CRITICAL MEME READER 58, 58 (Chloë Arkenbout et al. eds., 2022). This issue does not prevent the use of machine learning and other automated analysis techniques for non-memetic audiovisual data. *See, e.g.*, Allen Hu & Song Ma, Persuading Investors: A Video-Based Study 1–2 (July 12, 2021) (unpublished manuscript), https://ssrn.com/abstract=3583898 [https://perma.cc/6T93-DQFR] ("[T]o quantify persuasion delivery, we exploit machine learning (ML) algorithms to quantify features along visual, vocal, and verbal dimensions.").

101. Note, the data was collected from an IP address in Brisbane, Australia (where one of the authors was based). Thus, the geographic distribution of the dataset is not well explained by geolocation-based algorithmic video recommendation.

The most prevalent coded theme was meme videos (62.9%), followed by promotional videos (17.1%), advisory videos, (12%) and lifestyle videos (8%).[102] In terms of sentiment, a large majority of the videos (66.9%) were coded as mixed. The vast majority of these videos were memes, that is, most of the meme videos had a mixed sentiment. Sentiment among the remaining portion of the sample was roughly coded evenly as positive (16%) and negative (17.1%).

The rest of this section discusses the results of our thematic and qualitative sentiment analysis and highlights key data points that are relevant for understanding the consumer protection risks due to BNPL.

A. Memes

The majority of the videos in our sample were coded as meme videos (62.9%). This is not surprising given our sampling strategy and the nature of algorithmic discovery and virality on TikTok. TikTok uses an algorithmic recommender system that captures extensive data on video performance (how many times a video has been viewed to completion, how many likes, comments, and shares it has, etc.) when determining how to recommend videos and to whom.[103] Memes are an appealing currency for users vying to improve their visibility on a platform that relies heavily on algorithmic recommendation. They are more likely to gain views and are easy to replicate with "socially creative features" that enable users to engage in participatory practices and join popular trends.[104]

It is also useful to consider why users would be making and sharing memes about BNPL on TikTok, and what kinds of communities these memes might reach. Considering Marshall McLuhan's well-known maxim, "the medium is the message,"[105] internet memes are understood as digital cultural objects that are intentionally created by individuals or groups and whose meaning is transformed through transmission online.[106] Sangeet Kumar argues that memes are a "new mode of [public] deliberation" that can disguise deeper

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102. Reported to one decimal place.

103. *See How TikTok Recommends Videos #ForYou*,TIKTOK (Jun. 18, 2020), https://newsroom.tiktok.com/en-us/how-tiktok-recommends-videos-for-you [https://perma.cc/VN8M-G5XL**]**.18, 2020), https://newsroom.tiktok.com/en-us/how-tiktok-recommends-videos-for-you [https://perma.cc/VN8M-G5XL**]**.

104. *See* Abidin & Kaye, *supra* note 100, at 59–60.

105. MARSHALL MCLUHAN, UNDERSTANDING MEDIA: THE EXTENSIONS OF MAN 7 (1964).

106. *See* Limor Shifman, *Memes in a Digital World: Reconciling with a Conceptual Troublemaker*, 18 J. COMPUT.-MEDIATED COMMC'N 362, 373 (2013); *see also* Adler & Fromer, *supra* note 11, at 478 (referring to memes as "paradigmatic of contemporary cultural expression").

social criticism through a mask of glib lightheartedness.[107] Through their spreadable nature and context-specific vernacular, memes can connect groups of users together, creating and strengthening communities of interest.[108]

Most of the memes in our sample displayed a mixed sentiment. In many of these videos, creators conveyed a mixture of pleasure at their material acquisitions, and the ease with which they can acquire material goods using BNPL, as well as displeasure at late payment fees and lingering debts. Many of the meme videos had a humorous or sardonic tone. A small subset of meme videos displayed absurdist humor of creators suggesting the use of BNPL to pay off expensive items in small installments (such as, "when I finance a car using Afterpay with 300,000 payments of only $10.99 a month").

Negative themes observed in the memes included over-indebtedness, shopping addiction, and buyer's remorse. For example, one meme read "when you used afterpay and klarna and now have $1500 worth of stuff split into 4 easy payments and the payments aren't easy anymore." The video was captioned "things have just gotten real 🙃" and the creator is miming the words "so you're telling me I have to come up with a solution all by myself to a problem that I created all by myself? Well that's not fair."

Other memes included negative statements such as "my klarna addiction 2020," "New year and we are leaving klarna and all them 4 payment companies alone !!!," "Klarna is a dangerous app," and "We all need rehab from Klarna😅." Additional hashtags associated with these memes invoked themes of indebtedness and unaffordability (#brokebuthappy, #broke, #nomoney, #cantpaywelltakeitaway, #missedpayment), shopping addiction (#shoppingadict, #missedpayment, #gottastopspendingmoney, #badhabits), financial responsibility (#debtfree, #finance101, #savingmoney), and consumption (#sheinhaul, #fashionhacks).

Positive themes observed in the memes included access to credit and consumption due to BNPL. For example, one meme read "Afterpay and klarna make dreams come true," "I don't care how much money we got, when it's time to check out we're using quadpay, klarna and afterpay," "I'll be paying 4 payments for the rest of my life 😂😂," and "Cause why pay full price when you don't have to😊."

A small subset of the memes depicted consumers strategically gaming the system to avoid repaying Klarna. This includes the strategic use of prepaid

107. *See* Sangeet Kumar, *Contagious Memes, Viral Videos and Subversive Parody: The Grammar of Contention on the Indian Web*, 77 INT'L COMMC'N GAZETTE 232, 243–44 (2015).

108. *See* Adler & Fromer, *supra* note 11, at 483–87 (reviewing the literature and describing the power of memes to create a common and participatory culture).

cards ("You can't cancel it. Just use a prepaid card with enough money on it for the initial amount and then just not worry about the rest") and debit or credit cards ("use Klarna or Quadpay and use a debit card that you won't ever use and only put the (1)"), and strategically defaulting on payments ("Who is Afterpay after the second payment? 😂😂😂").

In another small subset of memes, Klarna was seen engaging with creators in the comments, often in an intimate manner and using the TikTok/Gen Z vernacular proficiently. This included words of encouragement for the use of Klarna products ("Welcome to the fam 💝"), acknowledgment of the creator's appreciation for Klarna ("girl we can feel the love and we're sending it right back to you"), and conversations with the creator ("what are we buying material girl?").

Several of the memes invoked multiple BNPL products, seen in on-screen text as well as hashtags such as #Affirm and #Afterpay.

B. Lifestyle and Promotional Videos

Videos coded as promotional (17.1%) and lifestyle (8%) collectively made up the second largest thematic block. While we distinguished these two categories, both related more directly to products and commerciality as compared to the memes and advisory videos. Lifestyle videos were those in which creators discussed, criticized, or celebrated purchases that they had made using BNPL, or the use of BNPL more generally. Most of these videos took the form of monologues, where the creator spoke at length to the viewer about their purchases.

Lifestyle videos had a mostly positive or mixed sentiment. For example, in one lifestyle video the creator takes the viewer on a tour of her building, showing off recent purchases. She repeatedly asks the viewer "who broke?" before finally responding "still gonna pay in . . . 4"—seemingly dispelling concerns that BNPL will leave you worse off. However, some lifestyle videos were more negative. For example, one video depicted a creator complaining about missed payment notification letters received from Klarna for goods purchased from, but subsequently returned to, an online fashion retailer. The creator argued that Klarna should be chasing the merchant, not her, about the missing payments.

In promotional videos, creators either advertised products that could be purchased using BNPL products or advertised BNPL products directly. In contrast to lifestyle videos, these videos were more in the nature of traditional marketing videos. Many were from merchant accounts. The majority provided an explicit call to action to the viewer to use BNPL. A small minority of these videos was primarily advertising third party brands and mentioned Klarna only indirectly as a hashtag.

In terms of paid influencing, only three videos in our sample included "#ad" and were coded as positive in the promotional thematic category. According to TikTok's commerce policy, paid advertising must be disclosed to viewers by using the disclosure hashtag "#ad," in addition to being subject to TikTok's advertising terms.[109] Since its international launch in 2018, TikTok has placed increased emphasis on growing e-commerce systems on its platform, taking several steps to implement shopping and e-commerce services in service of influencer marketing and courting more advertisers and brands to its platform.[110]

C. Advisory Videos

Our final thematic category, advisory (12%), included spoken word or text-heavy videos that either provided information about, or cautioned viewers against, the use of BNPL products. In contrast to the previous thematic categories, creators of these videos were explicitly analyzing BNPL as consumer financial solutions and highlighting the potential risks for consumers.

Most of the advisory videos had a negative sentiment and were akin to warnings to consumers not to use Klarna (or other BNPL products) based on the creator's negative personal experiences with BNPL. Some of these videos were from merchants discussing their decision to introduce Klarna or other BNPL options ("we sell non-essential stuff, technically no one needs this. The last thing I want to do is encourage people to spend past their means," with another creator responding "klarna has seen so many get into long term debt too . . . v sensible and shows you care about customers!").

Other advisory videos were from finfluencers and consumer advisory organizations. They included warnings, such as "companies like Afterpay encourage you to spend above your means," "klarna is creating a culture of normalising borrowing and overspending [sic]," "klarna legally doesn't have to get its promoters and influencers to talk about the risks of using its service,"

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109. *See Branded Content on TikTok*, TIKTOK, https://support.tiktok.com/en/business-and-creator/creator-and-business-accounts/branded-content-on-tiktok [https://perma.cc/BQ3F-E5YR] (last visited Jan. 28, 2023) ("You must enable the Branded content toggle when posting Branded content on TikTok. When you enable the toggle, it adds a disclosure (for example, #Ad) to the description of your post.").

110. *See* Bondy Kaye et al., *The Co-Evolution of Two Chinese Mobile Short Video Apps: Parallel Platformization of Douyin and TikTok*, 9 MOBILE MEDIA & COMMC'N 229, 246 (2020); BONDY KAYE ET AL., TIKTOK: CREATIVITY AND CULTURE IN SHORT VIDEO 6–7 (2022).

"people who are using klarna are being declined when it comes to mortgages . . . because mortgage lenders view klarna payments as ongoing monthly payments [for affordability purposes]," and "they aren't just a 'smooth' way to pay, they're unregulated financial products, that means you won't get the same protections on your purchases as you would with credit cards." Many of the videos published by finfluencers included hashtags associated with financial advice and education, such as #learnontiktok, #financetiktok, #moneytok, #personalfinance101, #budgeting, and #creditrepair.

IV. IMPLICATIONS FOR CONSUMER FINANCIAL LAW

Financial regulators need a variety of tools to keep up with the fast-changing and ever-growing consumer financial services market. As we explain more fully below, with the rise of FinTok, social media content analysis can serve as an additional tool for the CFPB and state financial regulators in the performance of their duties. As to the application of our analytical tool to the BNPL market, there are a number of tentative observations that one can draw. Given that there are clear limitations to our study, as articulated further below, these observations should not be treated as being conclusive. Rather, we see them as early warning signs that could help guide the study and regulation of the BNPL market, particularly by highlighting emerging practices that may give rise to consumer protection concerns.

A. Observations About the BNPL Market

As a general observation, the results of our study attest to the expanding FinTok paradigm. This includes the growing role of social media platforms as new sites and media for the delivery of financial services, particularly financial advice offered by finfluencers, and for interaction between financial institutions and consumers. More particularly, our study reveals that younger consumers actively use social media platforms to express their views on debt, finance, and consumption, including BNPL. In doing so, young consumers are quickly changing the lexicon of consumer finance—a phenomenon also observed in other fora, such as Reddit.[111] The most notable new forms of

111. *See* Justin Hartwig, *WallStreetBets Slang and Memes*, INVESTOPEDIA (Feb. 10, 2021), https://www.investopedia.com/wallstreetbets-slang-and-memes-5111311 [https://perma.cc/Z4RB-YKS9].

expression and social influence in consumer financial markets are memes, emojis, hashtags, and new slang terms.[112]

Our study also unveils insights into consumers' experiences with BNPL that could serve as an entry point for the further study and regulation of the BNPL market. Crucially, our study reveals evidence of consumers' negative experiences with BNPL due to over-consumption, unaffordable borrowing, and over-indebtedness. This is indicated by, among other things, the use of hashtags such as "addiction," "no money," "broke," and "missed payment." Our study also reveals evidence of practices such as strategic default by BNPL consumers, including arbitrage between BNPL and other credit products such as credit cards, which raise both consumer protection and market efficiency concerns.

These insights could provide a useful early warning signal for regulators, as articulated further below.[113] Nevertheless, they should be interpreted cautiously. Among other things, there is inherent subjectivity and bias in our manual coding of sentiment and themes, which we have endeavored to minimize through intercoder reliability testing. There are also uncontrolled variables that could have influenced our results, such as changes in the regulatory environment during the period in which the sample was collected (for example, the introduction of credit reporting by BNPL providers and changes in fee-charging practices, as discussed above).

Importantly, our small-scale, qualitative approach is non-generalizable and does not aim to produce causal inferences. The experiences of a limited sample of consumers with just one BNPL product (Klarna) on one social media platform (TikTok) do not necessarily reflect the experiences of all consumers with all BNPL products, not least the experience of the average consumer. For example, it is possible that more predatory BNPL products are consumed by populations that are not active on TikTok or social media. Likewise, high late payment fees may be more prevalent among smaller, lesser-known BNPL lenders that do not have the market power to profit from charging high *transaction* fees to merchants.[114]

Equally, our data could be over-inclusive, as suggested by the presence of multiple BNPL hashtags. Consumers could be describing their experiences with only certain BNPL products, but including hashtags for all, or the most

112. *See also* Adler & Fromer, *supra* note 11, at 477 (arguing that "legal scholars should take memes seriously").

113. *See infra* Section IV.B.

114. *See* Dylan Sloan, *Why Regulation Will Help the Buy Now, Pay Later Giants*, FORBES (July 12, 2022, 2:16 PM), https://www.forbes.com/sites/dylansloan/2022/07/12/why-regulation-will-help-the-buy-now-pay-later-giants/?sh=62d6a397f959 [https://perma.cc/P7CU-WV7X] ("[U]pstart competitors who are unable to secure lucrative merchant partnership deals are left with collecting [late payment] fees as their primary source of income.").

popular BNPL firms, such as Klarna, in order to game the TikTok algorithm and increase views for their videos.[115] Or, they could be describing their experiences with longer-term BNPL products offered by Klarna and other BNPL firms, which were not the focus of our study. More generally, our data (in particular, the sentiment analysis) is likely to be biased by the performative desires of TikTok creators to "go viral" with their videos.[116] That said, the videos in our dataset cannot be purely performative and must at least partially convey consumers' actual experiences with BNPL (if only because getting into debt is not the least-cost way of going viral). Our dataset also spans different geographies and jurisdictions in which Klarna and TikTok are present—notably, the United States and United Kingdom. Although there are similarities between these markets, there are also important differences which necessarily limit the conclusions that we can draw from our data about the BNPL market in the United States.

An adjacent concern is underreporting by consumers. Underreporting of credit usage and personal financial problems has been observed in other settings, including consumer credit survey data.[117] Underreporting is partly the result of consumer myopia and low debt-literacy.[118] This is due to, among other things, the complexity of consumer credit products, which makes them challenging for many consumers to understand, and the mixed experience-credence nature of credit, which means that harmful consequences are not immediately discernible, if ever.[119]

Consumer myopia is also due to behavioral biases that impede rational financial decision-making by consumers. Particularly relevant in this context are present and optimism biases, and consumers' time-inconsistent preferences (credit satisfies their short-term preferences but not their long-term preferences). It is possible that the promise of "zero interest" BNPL

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115. The presence of multiple BNPL hashtags is more likely to reflect search engine optimization techniques commonly deployed by creators on TikTok, rather than evidence of loan stacking. *See, e.g.*, Samantha Bradshaw, *Disinformation Optimised: Gaming Search Engine Algorithms To Amplify Junk News*, 8 INTERNET POL'Y REV. 1, 3 (2019).

116. On performativity, see generally JOHN L. AUSTIN, HOW TO DO THINGS WITH WORDS (1962); JUDITH BUTLER, GENDER TROUBLE: FEMINISM AND THE SUBVERSION OF IDENTITY (1990).

117. *See, e.g.*, Jonathan Zinman, *Where Is the Missing Credit Card Debt? Clues and Implications*, 55 REV. INCOME & WEALTH 249, 261–62 (2009) (finding underreporting of credit card borrowing in household surveys).

118. *See generally* Oren Bar-Gill & Elizabeth Warren, *Making Credit Safer*, 157 U. PA. L. REV. 1 (2008) (arguing for the creation of a new federal regulator to provide minimum product safety standards for credit products); Annamaria Lusardi & Peter Tufano, *Debt Literacy, Financial Experiences, and Overindebtedness*, 14 J. PENSION ECON. & FIN. 332 (2015) (finding, *inter alia*, low debt literacy based on surveys of consumers' self-reported financial experiences and debt loads).

119. *See* JOHN ARMOUR ET AL., PRINCIPLES OF FINANCIAL REGULATION 214 (2016).

credit attracts more present-biased, optimistic consumers.[120] These consumers are more likely to report satisfaction in the short-term, but experience harm in the long term (for example, due to the financial and emotional distress of over-indebtedness).[121]

Relatedly, the advent of online BNPL products is still rather recent, and the problems that arise from their use could still be in the offing. As such, our study is limited by a lack of time series data on consumer outcomes, and a comprehensive picture of the financial lives of the consumers in our dataset. The latter would, at a minimum, be needed to draw more reliable conclusions about relative harm to consumers due to BNPL.

Underreporting by financial consumers is also caused by social stigma relating to the discussion of personal finance issues, particularly personal debt problems.[122] Underreporting in this regard may be more acute on TikTok. If consumers are not candid about personal financial problems in semi-private survey settings, they may be less likely to discuss these problems candidly in public fora such as TikTok. Moreover, as discussed earlier, the nature of algorithmic discovery and virality on TikTok favors memes.[123] Memes are, by definition, more humorous and may be less conducive to discussing "real problems," such as personal debt issues, at least

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120. Research shows that the present-based, optimistic consumers are more likely to borrow and carry more debt on average. *See, e.g.*, Xavier Gabaix & David Laibson, *Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets*, 121 Q.J. ECON. 505, 526 (2006); Stephen Meier & Charles Sprenger, *Present-Biased Preferences and Credit Card Borrowing*, 2 AM. ECON. J.: APPLIED ECON. 193, 205–06 (2010). Such consumers could be similarly drawn to "zero interest" BNPL credit. Meier & Sprenger, *supra*.

121. *See* John Gathergood, *Debt and Depression: Causal Links and Social Norm Effects*, 122 ECON. J. 1094, 1099–1100 (2012); Guttman-Kenney et al., *supra* note 31, at 3, 15–16.

122. *See, e.g.*, Teresa A. Sullivan et al., *Less Stigma or More Financial Distress: An Empirical Analysis of the Extraordinary Increase in Bankruptcy Filings*, 59 STAN. L. REV. 213, 215 (2006) (investigating the relationship between social stigma and bankruptcy filings and suggesting that the "stigma of bankruptcy may actually be increasing"); Michael D. Sousa, *Debt Stigma and Social Class*, 41 SEATTLE U. L. REV. 965, 965 (2018) (finding that the higher a person's social position, the more likely they are to "feel shame, stigma, or embarrassment because of troubling financial debt"); Joe J. Gladstone et al., *Financial Shame Spirals: How Shame Intensifies Financial Hardship*, 167 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 42, 51 (2021) (providing evidence of "a vicious cycle between shame and financial hardship"). *But see* Zinman, *supra* note 117, at 261 (noting that "[i]ntentional underreporting of behavior that is viewed as socially undesirable is always a concern for household surveys[,]" but "if stigma played a role it would be declining over time as credit card use becomes more prevalent"); META BROWN ET AL., FED. RSRV. BANK N.Y., DO WE KNOW WHAT WE OWE? A COMPARISON OF BORROWER- AND LENDER-REPORTED CONSUMER DEBT 31 (2013), https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr523.pdf [https://perma.cc/57DH-DMRT] (attributing evidence of underreporting by consumers of personal debt to uninformedness rather than social stigma).

123. Abidin & Kaye, *supra* note 100, at 59–60.

not in a way that allows those problems to be easily discerned.[124] At the same time, however, TikTok videos are known to display a high level of self-disclosure and intimacy.[125]

B. #FinTok as a Regulatory Tool

With the rise of FinTok, the social media content analysis methodology presented in this Essay can become a useful tool for financial regulators in the performance of their consumer finance law-related duties. Consumer finance law concerns itself with market relationships, specifically in instances where the markets do not sufficiently police themselves.[126] This insufficiency may result from a market failure or because competitive pressures cause the interests of firms and consumers to diverge in harmful ways.[127]

Sometimes consumer financial law interventions come *ex post*, as a response to problems that have already occurred or that are ongoing.[128] At other times the regulatory intervention is *ex ante* and precautionary, in order to avoid harm from occurring in the first instance.[129] Because financial markets are constantly changing, a great deal of consumer finance law comes in the form of regulation, rather than statute, since regulations can be changed more quickly through agency action and are drafted with the benefit of agency staff expertise.[130]

In the United States, the chief consumer financial regulator is the CFPB.[131] The agency was created in 2010 through the enactment of the Dodd-Frank

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124. *See* Adler & Fromer, *supra* note 11, at 477 ("[U]nless you spend your life online, memes frequently seem impenetrable, their meaning dependent on multiple references to other memes and to (often trivial) shards of pop culture.").

125. *See, e.g.*, Teagen Nabity-Grover et al., *Inside Out and Outside In: How the COVID-19 Pandemic Affects Self-Disclosure on Social Media*, 55 INT'L J. INFO. MGMT. 1, 2 (2020) (finding an increase in and changes to the nature of self-disclosure on social media platforms due to the Covid-19 pandemic).

126. ADAM J. LEVITIN, CONSUMER FINANCE: MARKETS AND REGULATION 13 (2018).

127. *Id.*

128. *See* CHRISTOPHER K. ODINET, FORECLOSED: MORTGAGE SERVICING AND THE HIDDEN ARCHITECTURE OF HOMEOWNERSHIP IN AMERICA 7 (2019).

129. *See* HILARY J. ALLEN, DRIVERLESS FINANCE: FINTECH'S IMPACT ON FINANCIAL STABILITY 163–92 (2022).

130. *See* LEVITIN, *supra* note 126, at 119; *see also* BERNARD SCHWARTZ ET AL., ADMINISTRATIVE LAW: A CASEBOOK 231–97 (2018); Shannon Roesler, *Agency Reasons at the Intersection of Expertise and Presidential Preferences*, 71 ADMIN. L. REV. 491, 501–04 (2019).

131. The initial idea for the agency came from then-law professor, now-US senator, Elizabeth Warren. *See* Elizabeth Warren, *Unsafe at Any Rate*, DEMOCRACY: J. IDEAS (2007), https://democracyjournal.org/magazine/5/unsafe-at-any-rate/ [https://perma.cc/5RMF-XRUJ]; *see also* Bar-Gill & Warren, *supra* note 118, at 98–100 (setting out the blueprint for the CFPB).

Wall Street Reform and Consumer Protection Act.[132] The agency, while not the only government body in the United States charged with consumer protection, is the most important since its legal authority reaches nationwide and across multiple markets and types of consumer financial firms. It is also given authority over a number of pre-existing federal consumer financial laws, such as those governing fair lending, electronic payments, and mortgages.[133]

Prior to the creation of the CFPB, the federal regulation of consumer finance was spread out over multiple agencies, which themselves often had other competing (or primary) missions that distracted from or completely overshadowed the protection of consumers.[134] The CFPB, on the other hand, consolidated consumer financial regulatory authority in just one agency with a single mission—to protect consumers in their financial dealings.[135]

The CFPB has a handful of congressionally-mandated functions.[136] For our purposes, the most relevant functions are: (1) to collect, research, monitor, and publish information pertaining to the functioning of consumer financial markets and to identify risks to consumers and proper market functioning; and (2) to supervise firms for compliance with, and bring enforcement actions when necessary related to, federal consumer financial laws.[137]

Currently, the CFPB fulfills its market monitoring function through requests for information ("RFIs") sent out to the general public relative to a certain financial product or service, as well as through targeted requests to certain companies for information. For example, in the former case, the CFPB has issued RFIs for the use of artificial intelligence in consumer finance,[138] credit scores,[139] and so-called junk fees.[140] As for the latter method, in December 2021, the CFPB ordered the five largest BNPL lenders to provide

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132. Dodd-Frank Wall Street Reform and Consumer Protection Act § 1011, 12 U.S.C. § 5491 (2010).

133. *See* 12 U.S.C. §§ 5481(12), 5481(14), 5512(a), 5518, 5531, 5532, 5538.

134. *See* LEVITIN, *supra* note 126, at 107–12.

135. § 5511(a)–(b).

136. § 5511(c).

137. *Id.*

138. *See* Request for Information and Comment on Financial Institutions' Use of Artificial Intelligence, Including Machine Learning, 16 Fed. Reg. 16837 (Mar. 31, 2021) (issued jointly with the Comptroller of the Currency, the Federal Reserve Board, the Federal Deposit Insurance Corporation, and the National Credit Union Administration).

139. *See* Request for Information Regarding Consumers' Experience with Free Access to Credit Scores, 82 Fed. Reg. 52284 (Nov. 13, 2017).

140. *See* Request for Information Regarding Fees Imposed by Providers of Consumer Financial Products or Services, 87 Fed. Reg. 5801 (Feb. 2, 2022).

information about their products.[141] Similar targeted requests have previously been made to the six largest technology companies—Amazon, Facebook, Apple, Google, Square, and Paypal—to provide information about their payment products, with the goal of shedding "light on the business practices of the largest technology companies in the world."[142]

The CFPB performs its supervision function through examinations.[143] This is where teams of CFPB officials inspect the books and records of certain companies with an eye toward ascertaining whether the firms are complying with consumer financial laws, as well as that they have systems and checks in place to ensure continued compliance in the future.[144] To guide their examiners, the CFPB issues a supervision manual that is to be used when conducting the examination.[145] The manual sets out three overarching principles that guide the CFPB's supervision and examination process: "Focus on consumers," "Data Driven," and "Consistency."[146] The second principle, "Data Driven," is particularly relevant to the present study. This principle "states that the supervision function rests firmly on analysis of available data," and that the supervision staff "will use data from a wide range of sources."[147]

The manual is divided into different sections, typically tailored to the type of business being studied.[148] As Adam Levitin notes, an examination usually begins with a meeting between the CFPB and management, the production of business records, and a review of the business's compliance systems.[149]

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141. *See CFPB Inquiry*, *supra* note 35.

142. *CFPB Orders Tech Giants To Turn over Information on Their Payment System Plans*, CONSUMER FIN. PROT. BUREAU (Oct. 21, 2021), https://www.consumerfinance.gov/about-us/newsroom/cfpb-orders-tech-giants-to-turn-over-information-on-their-payment-system-plans/ [https://perma.cc/A3YF-ECBR]. The orders themselves were not made public, but a sample order was provided. *See* ROHIT CHOPRA, CONSUMER FIN. PROT. BUREAU, ORDER TO FILE INFORMATION ON PAYMENT PRODUCTS (Oct. 21, 2021), https://files.consumerfinance.gov/f/documents/cfpb_section-1022_generic-order_2021-10.pdf [https://perma.cc/FDD4-K36W]. The CFPB has the power to enforce these orders through civil investigative demands. LEVITIN, *supra* note 126, at 150–51.

143. LEVITIN, *supra* note 126, at 131–33; *Supervision and Examinations*, CONSUMER FIN. PROT. BUREAU, https://www.consumerfinance.gov/compliance/supervision-examinations/ [https://perma.cc/W6UF-FBZG].

144. LEVITIN, *supra* note 126, at 131–33.

145. *See generally* CONSUMER FIN. PROT. BUREAU, CFPB SUPERVISION AND EXAMINATION MANUAL (Mar. 2022), https://files.consumerfinance.gov/f/documents/cfpb_supervision-and-examination-manual.pdf [https://perma.cc/ZG76-LAQT].

146. *Id.* at 6.

147. *Id.*; *see also* Littwin, *supra* note 22, at 929–30 (observing that the manual frequently highlights consumer complaints as data that examiners should consider).

148. *See* CONSUMER FIN. PROT. BUREAU, *supra* note 143; CFPB SUPERVISION AND EXAMINATION MANUAL, *supra* note 145.

149. LEVITIN, *supra* note 126, at 131.

Sometimes this preliminary exam will result in an on-site inspection whereby CFPB staff interview management and other employees of the business and more carefully comb through the company's records and files.[150] For a lender, the supervision team may look at actual loan files and borrower profiles, as well as records relative to loan servicing and debt collection.[151]

Two important features of supervision bear mentioning. First, the CFPB is not obligated to announce when it is coming to conduct an on-site examination.[152] The company may find itself subject to an exercise of the bureau's visitorial powers at any time that the CFPB deems appropriate.[153] Second, the examination and its results are confidential.[154] This is meant to encourage the firm to cooperate with the CFPB and to be forthcoming about ways that it needs to improve. More broadly, the examination process allows the bureau to discern how and where market practices develop and where regulatory issues may arise. In this way, supervision informally plays into the CFPB's market monitoring functioning since examinations may lead to the observation of trends.

We argue that the general methodology described above can be used in service of both the CFPB's market monitoring and supervision functions. In addition to sending out RFIs on specific topics, the data and methods presented in this Essay can help the bureau identify points of interest, problems, or confusion among consumers, including through iterative studies that target specific words or phrases generated from prior studies. In turn, the results of these studies can be used to inform examinations by helping CFPB officials become better apprised of points of concern among consumers before they rise to a more systemic level.

Also relevant for market monitoring is the ability for the CFPB to gain insights into how well consumers understand their legal rights. Here, the methodology presented in this Essay can assist regulators in understanding the effectiveness of certain disclosure regimes by observing misstatements or misinformation about consumer rights in the online setting. This, in turn, can inform the examinations of the correlative firms in terms of their disclosure compliance and risk mitigation systems. Importantly, FinTok data offers regulators insight into consumer populations and issues that are less visible through traditional supervision and market monitoring tools, including the

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150. *Id.*
151. *Id.*
152. *Id.*
153. For a discussion of visitorial powers in the banking context, see *Cuomo v. Clearing House Ass'n LLC*, 557 U.S. 519 (2009); *United States v. Gaubert*, 499 U.S. 315 (1991); and *United States v. Philadelphia Nat'l Bank*, 374 U.S. 321 (1963).
154. 12 C.F.R. § 1070.

CFPB's complaints database. Younger consumers, in particular, may be less likely to file a formal complaint with the CFPB or respond to a traditional consumer survey than they are to share their opinions about financial products in a TikTok video.[155]

We also observe that our methodology can be helpful in setting enforcement policy. Aside from supervision and market monitoring, the CFPB has the power to enforce federal consumer financial laws.[156] And indeed, supervisory exams, informed by market monitoring, can lead to information that ultimately results in an enforcement action. We see the possibility of certain applications of social media content analysis yielding information that could rise to the level of an enforcement action, for instance, when the data is sufficient to substantiate sending the suspect firm a civil investigative demand. A civil investigative demand allows the CFPB to act through subpoena power in collecting information from a company before commencing litigation.[157]

Additionally, states have their own financial services regulators.[158] Sometimes these regulators are structured as state-wide boards or commissions and at other times they are gubernatorially appointed commissioners or superintendents. These officials are responsible for licensing and supervising nonbank finance companies. As state law corollaries to the CFPB, and depending on their statutory authority, state financial services regulators may also be able to use the methodology we deploy in this Essay to aide in their own market monitoring, supervision, and enforcement activities.

To be sure, we do not suggest that the methods presented in this Essay should be used as a substitute for the more traditional methods by which the CFPB and state financial regulators fulfil their statutory duties. Rather, we advocate that these methods be used in a supplementary fashion, for example, by aiding the bureau in finding paths for additional exploration and in crafting specific questions in their RFIs, orders for information, examination interviews and questionnaires, or civil investigative demands.

Unlike traditional supervisory approaches, our methodology does not require regulators to request further information from firms or acquire new regulatory powers. As with most social media data, the data used in our

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155. This may also be because the nature of the issue is not captured by the complaint categories in the CFPB's database or the fields in a consumer survey.

156. 12 U.S.C. §§ 5564(a), 5481(14) (listing what constitutes federal consumer financial law).

157. *See* 12 U.S.C. § 5562(b)–(c).

158. *See* Seth Frotman, *Reimagining State Banking Regulators: How the Principles Underlying the Consumer Financial Protection Bureau Can Serve as a Blueprint for a New Regulatory Federalism*, 72 ME. L. REV. 241, 271 (2020).

study—audiovisual, user-generated content on TikTok—is publicly available. Additionally, industry or market-wide requests for information can often take months or even a year to assemble, since it requires firms, advocates, and regulators to expend time and resources submitting and then sorting comments. Our approach provides for a much quicker way to survey, in real time, a given market.

The methodology presented in this Essay can be designed and applied in different ways. As discussed earlier, regulators could code the data according to specific consumer protection risks, such as "credit reporting errors" and "payment difficulties," instead of the broad sentiment themes that we used. Moreover, the methods presented in this Essay should be viewed as a complement to other data-driven supervisory tools. Our methodology uses "thick data," qualitative methods. A key advantage of this approach is that it can uncover more nuanced perspectives that may not be revealed by automated, quantitative analysis—particularly where audiovisual, memetic content is concerned.

However, quantitative methods can also offer useful insights. One might imagine a situation where a regulator designs certain computer scripts to constantly monitor a given social media platform for designated hashtags. This could take the form of an automated social media consumer finance monitor, which identifies what issues are "trending" on TikTok and other social media platforms in relation to different financial products and practices. This process, in turn, can assist the regulator in detecting issues relative to certain companies, products, or issues that are worthy of regulatory attention and deeper study.

Nor is the utility of these methods for regulators limited to the study of the BNPL market or TikTok. As discussed at the outset, FinTok is a much broader paradigm, encompassing other social media platforms and financial markets. As such, we argue that the methods presented in this Essay can be applied by regulators to investigate manifold phenomena within the FinTok paradigm, including the regulatory implications of social media finfluencers—particularly celebrities—offering unlicensed or fraudulent financial advice and engaging in undisclosed financial marketing.[159] This concern is particularly acute in the context of retail digital currency investment markets.[160] Regulators, at least in the United States, are yet to

159. *See* Tiffany Hsu, *All Those Celebrities Pushing Crypto Are Not So Vocal Now*, N.Y. TIMES (May 17, 2022), https://www.nytimes.com/2022/05/17/business/media/crypto-gwyneth-paltrow-matt-damon-reese-witherspoon.html.

160. *See e.g.*, David Yaffe-Bellany, *How Influencers Hype Crypto, Without Disclosing Their Financial Ties*, N.Y. TIMES (May 27, 2022),

address new activities such as unpaid social media influencing and, more broadly, the implications for financial markets of large unregulated peer effects on social media.[161]

Finally, regulators deploying the methodology presented in this Essay must treat personal data sensitively and ethically. This includes respecting the privacy interests of the data subjects.[162] In particular, regulators should be careful not to reveal personal identities, following the approach taken in our study.[163]

V. CONCLUSION

Legal scholars may be tempted to dismiss social media and new forms of expression, such as memes and hashtags as unimportant for financial law.[164] This Essay, however, shows why that view is mistaken. FinTok is a new

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https://www.nytimes.com/2022/05/27/technology/crypto-influencers.html.https://www.nytimes.com/2022/05/27/technology/crypto-influencers.html.

161. U.S. financial regulators have thus far focused on a narrow range of securities law implications of social media platforms. *See, e.g.*, SEC, *supra* note 9; *Social Media*, FINRA, https://www.finra.org/rules-guidance/key-topics/social-media [https://perma.cc/G94E-CHDQ] ("Investors and financial services professionals alike are increasingly using social media for a variety of business purposes. Social Media may be a new medium, but FINRA's rules on communicating with the public are still applicable."); *Social Media: Consumer Compliance Risk Management Guidance*, FDIC (Dec. 11, 2013), https://www.fdic.gov/news/financial-institution-letters/2013/fil13056.html [https://perma.cc/GDF6-8YPR]; *see also* 17 C.F.R. §§ 275.206(4)-1 & 264.206(4)-3 (investment advisor and solicitation rules, as updated in 2020); *Examining Facebook's Proposed Cryptocurrency and Its Impact on Consumers, Investors, and the American Financial System*, U.S. HOUSE COMM. ON FIN. SERVS. (July 17, 2019), https://financialservices.house.gov/events/eventsingle.aspx?EventID=404001 [https://perma.cc/DY5E-7E4H]. Internationally, regulators have started to engage more with the risks of social media influencing. *See, e.g.*, *ASA Ruling on Klarna Bank AB*, U.K. ADVERT. STANDARDS AUTH. (Dec. 23, 2020), https://www.asa.org.uk/rulings/klarna-bank-ab-a20-1081031-klarna-bank-ab.html [https://perma.cc/5YW6-46S4] (ruling against four of Klarna's social media influencing posts on Instagram, describing them as "irresponsible for encouraging the use of Klarna's deferred payment service to help people lift their low mood during the Covid-19 lockdown"); Cathie Armour, *Regulatory Risk and Finfluencer Engagement for Company Directors*, AUSTRALIAN SEC. & INV. COMM'N (Nov. 2021), https://asic.gov.au/about-asic/news-centre/articles/regulatory-risk-and-finfluencer-engagement-for-company-directors/.

162. *See supra* note 97 and accompanying text.

163. On social media research ethics, see generally Matthew Zook et al., *Ten Simple Rules for Responsible Big Data Research*, 13 PLOS COMPUTATIONAL BIOLOGY (2017).

164. *See* Adler & Fromer, *supra* note 11; NYU School of Law, *NYU Law Forum—Memes on Memes and the New Creativity*, YOUTUBE (Nov. 3, 2021), https://youtu.be/GSfR5aaklHA [https://perma.cc/QA72-B4N3] ("Academics tend to dismiss meme culture and to think of it as some sort of abject, Gen-Z joke that everyone hopes will pass."). Of course, many non-legal scholars—particularly media and communications scholars—center the study of social media platforms and the forms of expression that these platforms engender.

paradigm in consumer financial markets with significant ramifications for consumer financial law. Whereas prior literature has focused on the doctrinal implications of the nexus between social media platforms and (consumer) financial markets, this Essay broadens the lens of analysis to include social media as a new methodological tool for consumer financial regulation.

Specifically, we argue that social media platforms such as TikTok offer fertile ground for understanding the experiences and attitudes of credit consumers, particularly younger, digitally native consumers, and the emerging social norms of digital credit markets. In turn, qualitative social media content analysis can be used by financial regulators—specifically, the CFPB and correlative state financial services regulators—as a new tool for performing three chief functions: *supervision* of and the bringing of *enforcement actions* against regulated entities, as well as more general *market monitoring*.

This Essay demonstrates the potential of social media content analysis for elucidating consumer financial law using a case study of audiovisual content on TikTok and the BNPL credit market. Our study reveals tentative evidence of payment difficulties and strategic default by consumers in the BNPL market. It also reveals that younger consumers actively use TikTok to express their views on debt, finance, and consumption, including BNPL. Furthermore, lenders actively leverage the affordances of social media to reach younger consumers, for instance, by directly commenting on videos and conversing with FinTokers.

We argue that regulators should leverage social media content analysis to identify early warning signals of consumer protection risks, particularly in less mature digital markets, such as BNPL, and treat these signals as points of entry for further investigation. This could include follow-up interviews with a subsample of FinTokers, using digital ethnographic techniques developed in other fields and building on ethnographic methods deployed by consumer financial law scholars in other contexts such as bankruptcy and traditional consumer credit markets.[165] Regulators should also explore the use of more quantitative methods for social media content analysis, to complement and scale the methods presented in this Essay.

165. *See, e.g.*, Lawless et al., *supra* note 99, at 355 ("In addition to the earlier data reported here, we add information gleaned from telephone interviews with a subset of 1000 of the families filing in 2007 who completed a questionnaire."); Angela K. Littwin, *Beyond Usury: A Study of Credit Card Use and Preference Among Low-Income Consumers*, 86 TEX. L. REV. 451, 454 (2008) (using snowball sampling to conduct "in-depth interviews, supplemented by documental materials, with fifty low-income women").