

## **Beyond Free Markets and Consumer Autonomy: Rethinking Consumer Financial Protection in the Age of Artificial Intelligence**

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### ABSTRACT

The rampant growth of artificial intelligence (AI) has reshaped the landscape of credit underwriting and distribution in consumer financial markets. Despite expanding consumers' access to credit, the unbridled use of AI by creditors has widened credit and wealth inequality along racial, gender, and class dimensions. However, the existing regulatory paradigms of consumer financial protection fail to meaningfully protect consumers against potential AI discrimination and exploitation. At its core, the failure of the existing legal regime lies in its fetishization of free market and consumer autonomy—the two ideological pillars of neoliberalism. Judges and lawmakers who subscribe to neoliberal ideals have consistently attributed credit market defects to individual choices, rather than systemic and inherited social inequalities. Today, this neoliberal ethos continues to inform mainstream legal responses to the threats posed by AI.

This article proposes an alternative. It argues that thinking of AI governance in purely individualist, dignitarian terms obscures the real source of algorithmic harm. Contrary to the neoliberal assumptions, AI-inflicted harms in credit markets—*i.e.*, discrimination and exploitation—are not the results of irresponsible creditor *conduct* or opaque markets. Rather, they are caused by unjust *relations* of data production, circulation, and retainment that reflect and reproduce systemic social inequalities. Understanding algorithmic harm as both individually and socially constituted can help us move away from the outdated neoliberal paradigms that idolize individual responsibility. It also opens up new avenues for legal reform. To reshape unjust data relations, this article proposes a propertarian approach to AI governance that involves: (1) reimagining the nature of data ownership, (2) creating a collective property right in data, and (3) building a collective data governance infrastructure anchored in the open digital commons.

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INTRODUCTION

For decades, our legal system have embraced neoliberalism as the dominant regulatory ethos for consumer financial protection.<sup>2</sup> Its twin pillars—*free market*

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<sup>2</sup> See generally Timothy P. R. Weaver, *Market Privilege: The Place of Neoliberalism in American Political Development*, 35 *STUD. AM. POLIT. DEV.* 104 (2021) (describing neoliberalism as the

and *consumer autonomy*—served as the guiding principles governing the supply and underwriting of credit. For markets to be *free*, constraints on informational flow must be removed, price distortions must be controlled,<sup>3</sup> and government should not regulate absent a market failure.<sup>4</sup> For consumers to be *autonomous*, markets must be transparent and transactions must be frictionless.<sup>5</sup> Consumers should have unfettered access to shopping options to satisfy their preferences.<sup>6</sup> Viewed holistically, these two pillars of neoliberalism undergird the prevailing ideology of consumer protection: the *freer* the markets, the more *autonomous* the consumers.

The ideal of free market finds legal expression in consumer credit disclosure laws. Such laws aim to facilitate the efficient and transparent flow of market information. Truth in Lending Act (TILA)<sup>7</sup> and Truth in Savings Act (TISA)<sup>8</sup> require creditors to disclose lending terms, as well as material risks and consequences therefrom. Behind the enactment of these Acts, Congress espouses the view that disclosure helps reveal the true cost of lending, which can level the playing field for creditors, and enable consumers to compare similar or substitutable products.<sup>9</sup>

The ideal of consumer autonomy is manifested by fair lending laws that aim to protect consumer choice and dignity.<sup>10</sup> Born out of the 1970s civil rights movement, statutes such as Equal Credit Opportunity Act (ECOA)<sup>11</sup> and Fair Housing Act (FHA)<sup>12</sup> prohibit creditors from *disparate treatment* of consumers based on their race, color, sex, religion, age, and national origin, or engaging in practices having *disparate impact* on the consumers' protected characteristics in any transactions involving the extension or distribution of credit.<sup>13</sup> Their central logic is that

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guiding principle that has been increasingly reflected in U.S. policy ideas and institutional innovations.).

<sup>3</sup> See Christine S. Wilson, *Free Markets, Regulation, and Legislation: A Place for Everything, and Everything in Its Place*, FED. TRADE COMM'N (Mar. 10, 2020) (discussing benefits of deregulation).

<sup>4</sup> See Robert H. Lande, *Market Power Without A Large Market Share: The Role of Imperfect Information and Other "Consumer Protection" Markets*, AM. ANTITRUST INST. WORKING PAPER NO.07-06, U.S. DEP'T OF JUSTICE (Mar. 8, 2007).

<sup>5</sup> See, e.g., Klaus Wertenbroch et al., *Autonomy in Consumer Choice*, 31 *MARKETING LETTERS* 429, 439 (2020); Donna J. Hill & Maryon F. King, *Preserving Consumer Autonomy in an Interactive Informational Environment Toward Development of a Consumer Decision Aid Model*, in *ADVANCES IN CONSUMER RESEARCH VOLUME 16*, 144-151 (Thomas K. Srull ed., 1989).

<sup>6</sup> See, e.g., United Nations Conference on Trade and Development (UNCTAD), *MANUAL ON CONSUMER PROTECTION* 11, 46 (2017); Quentin Andre et al., *Consumer Choice and Autonomy in the Age of Artificial Intelligence and Big Data*, 5 *CUSTOMER NEEDS AND SOLUTIONS* 28, 37 (2018).

<sup>7</sup> See 15 U.S.C. § 1601 *et seq.*

<sup>8</sup> See 12 U.S.C. § 4301 *et seq.* Regulation DD (12 C.F.R. § 1030) implements TISA.

<sup>9</sup> See Anne Fleming, *The Long History of "Truth in Lending"*, 30 *J. POL'Y HIST.* 236, 237 (2018).

<sup>10</sup> See Abbye Atkinson, *Borrowing Equality*, 120 *COLUM. L. REV.* 1403, 1420 (2020).

<sup>11</sup> See 15 U.S.C. § 1691 *et seq.*

<sup>12</sup> See 42 U.S.C. § 3601 *et seq.*

<sup>13</sup> See 15 U.S.C. § 1691(a). See also 42 U.S.C. §§ 3601, 3604.

discrimination impedes consumers' ability to make free decisions.<sup>14</sup> Congress has adopted the view that discrimination is intrinsically deplorable because it penalizes consumers based on their immutable characteristics rather than their conducts.<sup>15</sup>

Together, laws embodying free market and consumer autonomy ideals reinforce the neoliberal ideology of "individual responsibility."<sup>16</sup> Rather than treating credit inequality as a socially-constructed systemic problem, our consumer financial laws deem inequality as outcomes of individual choice.<sup>17</sup> Absent from the regulatory toolkit are the legal lexicons to describe systemic injustices, redress collective harm, or install broad social infrastructures. Over the past fifty years, this ideal of "individual responsibility"<sup>18</sup> has coalesced into a neoliberal consensus that crowded out alternative visions for our consumer financial protection regime.<sup>19</sup>

However, this neoliberal consensus is now disrupted and unraveled by the rise of artificial intelligence (AI) in consumer finance.<sup>20</sup> Because AI does not need transparent market information or human actions in making credit decisions, it renders the current disclosure-based consumer protection regime ineffective.<sup>21</sup> Regulators can no longer afford to ignore this inadequacy due to the rampant expansion of AI. Increasingly, credit bureaus and reporting agencies turn to AI to assess consumer creditworthiness..<sup>22</sup> FinTech lenders and banks are delegating

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<sup>14</sup> See *CFPB Targets Unfair Discrimination in Consumer Finance*, CFPB NEWSROOM (Mar. 2022), <https://www.consumerfinance.gov/about-us/newsroom/cfpb-targets-unfair-discrimination-in-consumer-finance/>

<sup>15</sup> See generally FRB, *FAIR LENDING REGULATIONS AND STATUTES: OVERVIEW*, CONSUMER COMPLIANCE HANDBOOK (2017).

<sup>16</sup> See LOÏC WACQUANT, *PUNISHING THE POOR: THE NEOLIBERAL GOVERNMENT OF SOCIAL INSECURITY* 1 (2009) (internal quotations omitted) (describing neoliberalism as "an ideological project and governmental practice mandating the submission to the free market and the celebration of individual responsibility in all realms.")

<sup>17</sup> See SUSANNE SOEDERBERG, *DEBTFARE STATES AND THE POVERTY INDUSTRY: MONEY, DISCIPLINE, AND THE SURPLUS POPULATION* 84-85 (2014).

<sup>18</sup> See *infra* Part I.B.1.

<sup>19</sup> See *infra* Part I.B.2.

<sup>20</sup> See Salomé Viljoen, *Ferment Is Abroad: Techlash, Legal Institutions, and the Limits of Lawfulness*, L. & POLIT. ECON. PROJECT (Apr. 20, 2021).

<sup>21</sup> See SOEDERBERG, *supra* note 17, at 84 (describing U.S. consumer protection as disclosure-based).

<sup>22</sup> See, e.g., Ann Carrns, *New Credit Score Systems Could Open Lending to More Consumers*. N.Y. TIMES (Oct. 9, 2015), <https://www.nytimes.com/2015/10/10/your-money/new-credit-score-systems-could-open-lending-to-more-consumers.html>; Bev O'Shea, *FICO XD: A Credit Score for Those With No Credit*, NERDWALLET (Nov. 22, 2021), <https://www.nerdwallet.com/article/finance/fico-xd-credit-score>

underwriting decisions to AI.<sup>23</sup> Advanced machine learning<sup>24</sup> techniques such as deep learning (DL) can now scrape unimaginable volumes of digital footprint in the blink of an eye. These algorithms can continually adapt and tune their parameters to reflect new informational intake with minimal or no human supervision.<sup>25</sup> Due to the uncountable parameters, even the programmers cannot understand AI’s predictions.<sup>26</sup> Moreover, AI generate predictions about consumer creditworthiness even without information such as credit history and formalized financial data. Instead, AI analyzes “fringe data”—*e.g.*, online subscriptions, club memberships, browser history, location, and social media—the relevance of which is questionable.<sup>27</sup> This process can be entirely unsupervised and incomprehensible, undermining the fairness of credit provision.<sup>28</sup>

### A. Normative and Legal Implications

This article examines the normative and legal implications of AI’s disruption of our consumer financial protection regime, and hence, of the neoliberal consensus.

Normatively, AI pierces through the façade of neoliberalism. With regards to the *free market* pillar, AI problematizes the notion that prices can ever be transparent or neutral. In digital environments where AI could use scrapped data to tailor-recommend products at inflated prices,<sup>29</sup> prices do not reflect the objective

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<sup>23</sup> See, *e.g.*, Laura Blattner, P-R Stark & Jann Spiess, *The Use of Machine Learning for Credit Underwriting: Market & Data Science Context*, FINREGLAB 24 (Sep. 2021); Becky Yerak, *AI Helps Auto-Loan Company Handle Industry’s Trickiest Turn*, WALL ST. J. (Jan. 3, 2019); Trevor Dryer, *How Machine Learning Is Quietly Transforming Small Business Lending*, FORBES (Nov. 1, 2018); Fannie Mae, *Mortgage Lender Sentiment Survey: How Will Artificial Intelligence Shape Mortgage Lending* (Oct. 2018).

<sup>24</sup> Machine learning is a subset of AI that can “learn from data and improve its accuracy over time without being programmed to do so.” Janine S. Hiller, *Fairness in the Eyes of the Beholder: AI, Fairness, and Alternative Credit Scoring*, 123 W. VA. L. REV. 907, 910 (2021).

<sup>25</sup> See generally Joe McKendrick & Andy Thurai, *AI Isn’t Ready to Make Unsupervised Decisions*, HARVARD BUSINESS REVIEW (Sep. 15, 2022), <https://hbr.org/2022/09/ai-isnt-ready-to-make-unsupervised-decisions>

<sup>26</sup> Florian Perteneder, *Understanding Black-Box ML Models with Explainable AI*, DYNATRACE ENGINEERING (Apr. 29, 2022), <https://engineering.dynatrace.com/blog/understanding-black-box-ml-models-with-explainable-ai/>

<sup>27</sup> See Brief for Center for Digital Democracy as Amici Curiae Supporting Respondents, *Spokeo, Inc. v. Robins*, No. 13-1339 (argued on Nov. 2, 2015), 2015 WL 5302538, at \*6-7. See also Fed. Trade Comm’n (FTC), *Data Brokers: A Call for Transparency and Accountability* (May. 2014).

<sup>28</sup> See Robert Bartlett, Adair Morse, Richard Stanton & Nancy Wallace, *Consumer-Lending Discrimination in the FinTech Era*, UC BERKELEY PUBLIC LAW RESEARCH PAPER 7 (Nov. 2019), <https://faculty.haas.berkeley.edu/morse/research/papers/discrim.pdf>

<sup>29</sup> See generally JULIE E. COHEN, BETWEEN TRUTH AND POWER: THE LEGAL CONSTRUCTIONS OF INFORMATIONAL CAPITALISM (2019); Aaron Shapiro, *Dynamic Exploits: Calculative Asymmetries in the On-Demand Economy*, 35 NEW TECHNOLOGY, WORK, AND EMPLOYMENT 162 (2020).

market value that consumers ascribe to their preferences.<sup>30</sup> With regards to the *consumer autonomy* pillar, AI challenges the prevailing understanding that more information is always better for consumers. This is because, AI, through manipulating personal data and inundating consumers with information, can easily distract consumers away from their true product preferences.<sup>31</sup> Under the psychological mechanism of confirmation bias,<sup>32</sup> overwhelmed consumers can easily agree to terms against their best interests.<sup>33</sup> FinTech companies and banks that incorporate into their businesses therefore undermine both free choice and market transparency.

Legally, AI exposes the true nature of equal credit access protection: an illusory promise. Existing consumer financial protection laws are formalist. They hinge onto the assumptions of market neutrality and formal equality of economic opportunities without recognizing the substantive, systemic inequalities in credit provision.<sup>34</sup> Consequently, our disclosure and fair lending laws adopt individual-based solutions to credit inequality, which is inherently ill-fit for systematic problems. Both the ECOA<sup>35</sup> and TILA<sup>36</sup> look exclusively to creditor's individualized conduct when assessing when they should look to the parties' market relations.

Yet, neoliberalism's emphasis on formal equality and individualism obscures the source of algorithmic harm: unjust market relations. Specifically, AI aggregates data of specific consumers in unaccountable ways and derives knowledge about general consumer groups from these aggregated data (*i.e.*, knowledge discovery processes); this affects both consumers within direct transactional relations with

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<sup>30</sup> See generally Robert Bartlett, Adair Morse, Richard Stanton & Nancy Wallace, *Consumer-Lending Discrimination in the FinTech Era*, NATIONAL BUREAU OF ECONOMIC RESEARCH (Jun. 2019), [https://www.nber.org/system/files/working\\_papers/w25943/w25943.pdf](https://www.nber.org/system/files/working_papers/w25943/w25943.pdf)

<sup>31</sup> See generally BARRY SCHWARTZ, *THE PARADOX OF CHOICE: WHY MORE IS LESS* (2009). See also David M. Grether & Louis L. Wilde, *Consumer Choice and Information: New Experimental Evidence*, 1 INFO. ECON. & POL'Y 115 (1983).

<sup>32</sup> See Lorenz Goette, Hua-Jing Han & Benson Tsz Kin Leung, *Information Overload and Confirmation Bias*, CAMBRIDGE-INET WORKING PAPER SERIES NO: 2020/06 (2020).

<sup>33</sup> See, e.g., Hao Zhang, Xiaofei Bai & Zengguang Ma, *Consumer Reactions to AI Design: Exploring Consumer Willingness to Pay for AI-Designed Products*, 39 PSYCHOL. & MARK. 2171, 2183 (2022); Ilker Koksall, *Artificial Intelligence May Know You Better Than You Know Yourself*, FORBES (Feb. 27, 2018), <https://www.forbes.com/sites/ilkerkoksall/2018/02/27/artificial-intelligence-may-know-you-better-than-you-know-yourself/?sh=5714a2b4058a>

<sup>34</sup> See Kate Sablosky Elengold, *Consumer Remedies for Civil Rights*, 99 B.U. L. REV. 587 (2019).

<sup>35</sup> Liability for disparate impact violation under ECOA hinges on whether the creditor has reasonably (objective standard) sought out less discriminatory alternatives to pursue legitimate business interests notwithstanding harms inflicted on consumers. See 12 C.F.R. § 202. See also FDIC, *FAIR LENDING LAWS AND REGULATIONS* (Mar. 2021).

<sup>36</sup> Good faith compliance (subjective standard) shields creditors from civil liability under TILA. See CFPB, *LAWS AND REGULATIONS: TRUTH IN LENDING ACT* (Apr. 2015).

creditors as well as those outside.<sup>37</sup> Creditors, who already subjugate consumers in credit markets, can use AI to further reinforce unjust market relations through controlling the channels of data production, circulation, and retainment. This defeats the neoliberal assumption consumer harm can only result from creditor's wrongful conduct, such as intentional discrimination, animus, or irresponsibility.

The remainder of this article proceeds as follows. Part I examines *what* underlies the neoliberal ideology of lending justice and *how* it became entrenched in the regulatory consciousness. It first peruses over the normative justifications for free market and consumer autonomy. Then, it lays out the historical context and material underpinnings of neoliberalism's takeover of credit legislation. Finally, it probes into how mainstream legal responses to credit inequality are informed by neoliberal ideals of free market and consumer autonomy.<sup>38</sup>

Part II explores the impacts of neoliberalism on the landscape and practice of AI credit underwriting. Specifically, this Part investigates two questions: How are AI technologies being introduced in ways that intensify systemic credit inequalities? To the extent that AI is used to exploit consumers through the extraction and commodification of consumer data, what are the exact locus and sources of algorithmic harm in these spaces? To answer these questions, Part II articulates a theory of price engineering and consent manufacture in to explain *why* and *how* AI technologies have been used to perpetuate unjust market conditions for credit access.

Part III illuminates new avenues for legal reform. It begins by critiquing three dominant legal proposals on the table. Despite correctly identifying the source of algorithmic harm, such proposals do not interrogate the flawed assumptions of free market and consumer autonomy. Their solutions tend not to venture beyond the classic neoliberal arguments for data transparency and consumer education.<sup>39</sup> The incompleteness of these proposals often leads to wrongheaded solutions that end up reinforcing unjust market relations. To address this problem, Part III proposes alternative pathways to build AI accountability. It lays out steps to reshape the presently unjust market relations of data production, circulation, and retainment through (1) reimagining the nature of data ownership, (2) creating a collective property right in data, and (3) building a collective data governance infrastructure anchored in the open digital commons.

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<sup>37</sup> See Salomé Viljoen, *A Relational Theory of Data Governance*, 131 YALE L.J. 573, 628 (2021).

<sup>38</sup> The neoclassical law-and-economics emphasis on Pareto efficiency as a normative value diverts scholarly and regulatory attention from distributive inequality. See Jediah Britton-Purdy, David Singh Grewal, Amy Kapczynski & K. Sabeel Rahman, *Building a Law-and-Political-Economy Framework: Beyond the Twentieth-Century Synthesis*, 129 YALE L.J. 1784, 1797 (2020).

<sup>39</sup> See Oren Bar-Gill, Cass R. Sunstein & Inbal Talgam-Cohen, *Algorithmic Harm in Consumer Markets*, HARVARD PUBLIC LAW WORKING PAPER NO. 23-05 (Jan. 10, 2023).

## B. Key Concepts and Definitions

Before delving into the details, it is necessary for us to first clarify some key concepts being invoked throughout this article:

(i) *Algorithmic Harm*: This article identifies two sources of algorithmic harm: (1) algorithmic *informational* harm, which refers to the harm that consumers suffer due to how information about them (whether or not owned by consumers or within their expectation of privacy) is being collected, processed, and engineered to construct archetypes of consumer preferences for market usage;<sup>40</sup> and (2) algorithmic *decisional* harm, which refers to the harm that consumers incur when algorithms make exploitative decisions regarding the consumers' specific market requests (*e.g.*, applying for a loan) by taking advantage of the consumers' market-induced insecurities or cognitive flaws through the use of biased information the algorithm has garnered about the individual consumer or the consumer demographic.<sup>41</sup> Whereas the former category describes harm generated through problematic inputs, the latter describes harm resulting from problematic outputs.

For the purposes of this article, the distinction between informational and decisional harm is useful for illustrating the processes of market exploitation in a highly engineered data environment. Without safeguards on information-processing, AI can create skewed market conditions under which prices attached to consumer preferences are neither neutral nor value-free. Without constraints on algorithmic decision-making, AI may use manufactured market information to extract above-market-rents from consumers.

(ii) *Knowledge Discovery*: This refers to the process by which data (*e.g.*, digital footprint, market information) regarding any consumer group or individual is discovered—that is, through data scraping, mining, and aggregating.<sup>42</sup> Data discovered via this process is then tuned and optimized to generate behavioral insights (*i.e.*, knowledge) about consumers who are subjects of algorithmic decision-making. Machine learning is a technique to conduct knowledge discovery. By way of illustration, machine learning generates predictions through the following steps: (1) data gathering and cleansing; (2) splitting the data into a training and a testing dataset; (3) training the predictive model with training dataset based on the algorithm's instructions; (4) validating the model with the testing dataset, and repeat.<sup>43</sup>

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<sup>40</sup> See Viljoen, *supra* note 37, at 586.

<sup>41</sup> See Bar-Gill, Sunstein & Talgam-Cohen, *supra* note 39.

<sup>42</sup> See Colin Shearer, *The CRISP-DM Model: The New Blueprint for Data Mining*, 5 J. DATA WAREHOUSING 13 (2000).

<sup>43</sup> See, *e.g.*, Tony Yiu, *Understanding Random Forest: How the Algorithm Works and Why it Is So Effective*, TOWARDS DATA SCIENCE (Jun. 12, 2019), <https://towardsdatascience.com/understanding-random-forest-58381e0602d2>. See also Paul Wanyanga, *Credit Scoring using Random Forest with*



This article focuses on a subset of machine learning—deep learning (DL)—that is currently being deployed by FinTech lenders to assess and underwrite consumer credit.<sup>44</sup> DL differentiates from earlier generations of machine learning in that it does not just summarize and reiterate statistical patterns. It continuously “learns” from past mistakes and adjust future interactions with consumer data inputs each time it makes a prediction.<sup>45</sup> After a few iterations, the DL algorithm matures its decision logic by eliminating noise data that is contradictory or irrelevant.<sup>46</sup>

(iii) *Credit Underwriting*: This refers to the practice of underwriting consumer credit through risk-based assessment of consumer creditworthiness. Typically, creditor base their decisions to extend or deny credit to a consumer on the following considerations: (1) the probability of default or delinquency (*i.e.*, consumer credit risk); (2) the opportunity cost of underwriting (*i.e.*, expected return); (3) the possibility of loan recovery for the type of financial product offered, factoring in the creditor’s asset portfolio (*i.e.*, risk adjustment).<sup>47</sup> If the creditor accepts the consumer’s application for a loan, then the creditor calculates an estimated price range for the risk-return tradeoff that would render the credit extension profitable.

Traditionally, creditors rely on the credit reports issued by credit bureaus (*e.g.*, Equifax, Experian, and TransUnion) to conduct risk-based lending.<sup>48</sup> Over the past three decades, credit scores (*e.g.*, FICO) and automated scoring systems based on linear regression have become the dominant method for underwriting consumer credit.<sup>49</sup> Both credit reports and credit scores are criticized to have systematically disadvantaged consumers with thin credit histories or lack prior engagement with

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*Cross Validation*, MEDIUM (Feb. 5, 2021), <https://medium.com/analytics-vidhya/credit-scoring-using-random-forest-with-cross-validation-1a70c45c1f31/>

<sup>44</sup> See Yanan Liu & Talia Gillis, *Machine Learning in the Underwriting of Consumer Loans*, HARVARD LAW SCHOOL CASE STUDIES 8-9 (Mar. 2020).

<sup>45</sup> See generally Roger Brown, *All That AI is ML But Not All That is AI is ML*, MEDIUM (Dec. 24, 2020), <https://medium.com/nerd-for-tech/-95d38af2f9ea>

<sup>46</sup> See Jason Brownlee, *Why Optimization Is Important in Machine Learning*, MACHINE LEARNING MASTERY (Jun. 2, 2021).

<sup>47</sup> See National Credit Union Administration, *Risk-Based Lending*, NCUA Letter to Federally Insured Credit Unions 99-CU-05 (Jun. 1999), <https://www.ncua.gov/regulation-supervision/letters-credit-unions-other-guidance/risk-based-lending>. Most industry guides refer to the NCUA 1999 Letter as establishing the standard for risk-based lending. See Credit Union National Association, *Best Practices: Risk-Based Lending: More Members, More Loans*, CREDIT UNION MAGAZINE 2 (2006), <http://ma.leagueinfosight.com/files/infosight/192/file/RBL%20Best%20Practices.pdf>

<sup>48</sup> See, *e.g.*, Lindsay Konsko & Bev O’Shea, *Credit Score vs. Credit Report: What’s the Difference?* NERDWALLET (Oct. 21, 2021). See also Michael Staten, *Risk-Based Pricing in Consumer Lending*, 11 J. L. ECON. & POL’Y 33 (2015).

<sup>49</sup> See Federal Reserve Bank of St. Louis, *What Are Credit Scoring and Automated Underwriting?* (Jan. 1, 1998), <https://www.stlouisfed.org/publications/bridges/winter-1998/what-are-credit-scoring-and-automated-underwriting>

the banking system.<sup>50</sup> In the last five years, creditors have increasingly shifted to AI to assess and underwrite consumer credit. The rise of AI credit underwriting coincided with the emergent practice of using alternative “fringe data” to assess consumer creditworthiness, which does not require formalized credit information used by conventional credit reporting and scoring.<sup>51</sup> Bankers and FinTech lenders tout the use of AI as the panacea to enhance credit access for the “unbanked” and the “underbanked” consumers. Its usage is most concentrated in the underwriting of unsecured personal loans and credit cards. Between 2015 and 2019, FinTech lenders doubled their share in the unsecured personal loan market and now account for 49% of originated loans.<sup>52</sup> Auto-lending<sup>53</sup> and small business lending<sup>54</sup> are also areas where machine learning underwriting models are in use.

## I. NEOLIBERAL TRANSFORMATION OF LENDING JUSTICE

Since the 1970s, Congress has striven to build a regulatory scheme to ensure the fair and equitable supply of credit as part of its grand vision to eradicate poverty and overcome the legacies of racial redlining.<sup>55</sup> These efforts coalesced into a series of legislative acts—*e.g.*, ECOA, FHA, TILA, TISA—designed to ensure equal access to credit through bolstering consumer autonomy and facilitating competitive, transparent markets. While these laws originate from the broad congressional desire

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<sup>50</sup> See FRB, REPORT TO CONGRESS ON CREDIT SCORING AND ITS EFFECTS ON THE AVAILABILITY AND AFFORDABILITY OF CREDIT (Aug. 2007). Submitted pursuant to section 215 of the Fair and Accurate Credit Transactions Act of 2003. See also Julapa Jagtiani & Catherine Lemieux, *The Roles of Alternative Data and Machine Learning in Fintech Lending: Evidence from the LendingClub Consumer Platform*, FEDERAL RESERVE BANK OF PHILADELPHIA, Research Department Working Paper 18-15 (Apr. 2018, revised Jan. 2019).

<sup>51</sup> See Aite Group, *Alternative Data Across the Loan Life Cycle: How Fintech and Other Lenders Use It and Why*, prepared for Experian (2018), [https://www.experian.com/assets/consumer-information/reports/Experian\\_Aite\\_AltDataReport\\_Final\\_120418.pdf/](https://www.experian.com/assets/consumer-information/reports/Experian_Aite_AltDataReport_Final_120418.pdf/)

<sup>52</sup> See, *e.g.*, Experian, *Fintech vs. Traditional Fls: Trends in Unsecured Personal Installment Loans* 3 (2019); DBRS, *U.S. Unsecured Personal Loans—Marketplace Lenders Continue to Expand Market Share* 3-4 (2019).

<sup>53</sup> See Becky Yerak, *AI Helps Auto-Loan Company Handle Industry’s Trickiest Turn*, WALL ST. J. (Jan. 3, 2019), <https://www.wsj.com/articles/ai-helps-auto-loan-company-handle-industrys-trickiest-turn-11546516801>

<sup>54</sup> See Trevor Dryer, *How Machine Learning Is Quietly Transforming Small Business Lending*, FORBES (Nov. 1, 2018), <https://www.forbes.com/sites/forbesfinancecouncil/2018/11/01/how-machine-learning-is-quietly-transforming-small-business-lending/?sh=2b29155a6acc>

<sup>55</sup> See Winnie F. Taylor, *The ECOA and Disparate Impact Theory: A Historical Perspective*, 26 J. L. & POL’Y 575, 631 (2018); Francesca Lina Procaccini, *Stemming the Rising Risk of Credit Inequality: The Fair and Faithful Interpretation of the Equal Credit Opportunity Act’s Disparate Impact Prohibition*, 9 HARV. L. & POL’Y REV. S43, S48 (2015); Jamie Duitz, *Battling Discriminatory Lending: Taking a Multidimensional Approach Through Litigation, Mediation, and Legislation*, J. AFFORDABLE HOUS. & CMTY. DEV. L. 101, 107 (2010).

to extend the fruits of the civil rights movement to credit provision, they eventually merged with the prevailing individualist ideology that saw formal-egalitarian safeguards for market freedom as bulwarks against poverty.<sup>56</sup> Over the past fifty years, the marriage between civil rights and laissez-faireism evolved into a bipartisan neoliberal consensus that guided almost all significant federal regulatory responses to credit inequality. The dominant legal response endorsed by judges, regulators, and scholars is that credit inequality can largely be resolved by maintaining the relatively simple rules of market- and race-or-gender-neutrality to protect consumers autonomy, freedom, and security.<sup>57</sup>

This Part challenges the twin ideals of free market and consumer autonomy that undergird the current normative paradigm of lending justice. As the following sections aim to show, the notion that markets are neutral and objective is nothing but an ideology—value-laden and susceptible to manipulation. By extension, the idea that individual market freedoms can be adequately protected by race-or-gender-neutrality suffers from the same flaw. As such, this Part delegitimizes the dominant normative justification for delegating public solutions to credit inequality to the private markets, which is premised on the inherent desirability of protecting market- and race-or-gender-neutrality.

#### A. *The Neoliberal Normative Account of Lending Justice*

The 1970s saw the convergence of two intellectual traditions that formed the normative basis of lending justice in America: laissez-faire economics and the civil rights discourse. The former, which imagines the market as a domain autonomous from the state,<sup>58</sup> originated from a bipartisan repudiation of New Deal economics and a revival of Hayekian theories of market freedom from state intervention.<sup>59</sup> The

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<sup>56</sup> See generally MILTON FRIEDMAN, *CAPITALISM AND FREEDOM* (1962) (arguing that political and economic freedoms are linked, promoting laissez faire and individual choice over government intervention); WORLD BANK, *GLOBALIZATION, GROWTH AND POVERTY* (2002) (arguing that neoliberal growth paradigms focusing on protecting robust private property rights and freedom of contract is conducive to global poverty reduction); David Dollar & Aart Kraay, *Growth is Good for the Poor*, 7 J. ECON. GROWTH 195, 209 (2002) (arguing that policies and institutions enhancing the strength of private property rights, establishing the rule of law, and promoting financialization are conducive to global poverty reduction).

<sup>57</sup> See, e.g., Ilsup Ahn, *Reconstructing an Ethics of Credit in an Age of Neoliberalism*, 10 RELIGIONS 484 (2019); Tayyab Mahmud, *Debt and Discipline: Neoliberal Political Economy and the Working Classes*, 101 KENTUCKY L.J. 1, 46 (2013) (“With the neoliberal call for individuals to secure their freedom, autonomy and security through financial market and not the state, practices of investment, calculation and speculation became signs of initiative, self-management, and enterprise.”).

<sup>58</sup> See Britton-Purdy, Grewal, Kapczynski & Rahman, *supra* note 38, at 1795-96.

<sup>59</sup> See generally FREDRICH A. HAYEK, *THE ROAD TO SERFDOM* (1944). See also F.A. HAYEK, *LAW, LEGISLATION, AND LIBERTY* (1973) (further fleshing out the theory of market freedom that Hayek previously discussed in the *Road to Serfdom* and other earlier writings).

latter, which conceptualizes the formal differences of race, sex, and ethnicity as immutable personal traits free from any form of social or governmental coercion, traces its roots to Lockean understandings of individual liberty.<sup>60</sup>

While the two intellectual movements were born out of distinct historical contexts that dealt with different social priorities, the two became entangled in the decades subsequent to the 1970s and eventually merged by the early 1990s as America turned towards neoliberalism.<sup>61</sup> By the early 2000s, the amalgamation between civil rights and neoliberalism was largely complete.<sup>62</sup> Mass culture has recast the history of civil rights into a movement for racial progress, assimilation, and equal opportunity in America.<sup>63</sup> The predominant narrative during the millennial turn was that of celebrating racial redemption and individual uplift.<sup>64</sup> This narrative coincided with the triumph of neoliberalism, which saw the need to protect personal autonomy via individual responsibility as the basis for installing a governmental program of divesture from public goods and delegating social resource allocation to the private markets through de-regulation.<sup>65</sup>

The critical ideological nexus conjoining civil rights and laissez-faireism is the notion that *free* markets produce *autonomous* economic agents. Its central logic can be dissected into the following components: First, markets that are free from state or social influence produce the most welfare-enhancing outcome in terms of resource allocation. Second, welfare is defined in terms of value maximization, achievable only by eliminating negative externalities and reaching (Pareto) efficiency. Third, an efficient market is undergirded by the transparency and unfettered availability of market (price) information. Fourth, without social or political distortions, market prices convey neutral signals of objective value that match the right resources to the right kind of consumers. Finally, by matching resources with consumer preferences via market supply and demand, free markets empower consumers to express their identities by choosing what they buy, which

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<sup>60</sup> A common argument for the linkage between liberty, property, and civil rights is the notion that individual proprietorship is the basis upon which all civil rights rest because it protects individual autonomy and sovereignty in a market society. See Carol M. Rose, *Property as the Keystone Right?* 71 NOTRE DAME L. REV. 329, 333-34 (1996). This proposition traces its origins to John Locke's social contract theory. See generally JOHN LOCKE, TWO TREATISES OF GOVERNMENT, THE SECOND TREATISE §§ 28, 46-47, 123-31 (Peter Laslett ed., 1963) (1st ed. 1960).

<sup>61</sup> See George Baca, *Neoliberalism and Stories of Racial Redemption*, 32 DIALECTICAL ANTHROPOLOGY 219, 220 (2008).

<sup>62</sup> See *id.* at 219.

<sup>63</sup> See Rachel Fest, *Culture and Neoliberalism: Raymond Williams, Fredrich Hayek, and the New Legacy of the Cultural Turn*, 34 MEDIATIONS 9, 12 (2021) (articulating the theory of neoliberal mass culture through the prism of racial capitalism).

<sup>64</sup> See Baca, *supra* note 61, at 219.

<sup>65</sup> Specifically, the neoliberal theory of individual responsibility justifies state's steady disinvestment in public goods such as education, healthcare, affordable housing, and transportation. See generally DAVID HARVEY, A BRIEF HISTORY OF NEOLIBERALISM (2005).

brands they associate with, and what products they avoid. As such, free markets—buttressed by the transparent and efficient flow of neutral price-signals—create the material foundations for consumers free expression and association.

To protect the *freedom* of markets, neoliberals believe that governments should protect the market’s immunity from social or state coercion.<sup>66</sup> Karl Polanyi famously characterized modern capitalism as an interconnected web of political-economic practices, policies, and institutions creating a system of “dis-embedded” markets<sup>67</sup>—*i.e.*, where transactions are rooted in rational self-interest rather than embedded in social relationships (determined by kinship ties, community values, and cultural customs).<sup>68</sup> Building on the Polanyian insight, critics of neoliberalism have identified the notion of “dis-embeddedness” as a central component of neoliberalism’s justification for laissez-faire economic policy.<sup>69</sup> From a neoliberal perspective, a “dis-embedded” market is necessarily a *free* market because social control over the economic processes of production and consumption is absent. In “dis-embedded” markets, price communicates objective information regarding the value of resources transacted because it is unsullied by the distortive deadweight losses generated by undue governmental or social influence. Prices operate as signals for economic opportunity since they allow market participants who possess different preferences, forecasts, and knowledge about resource use to create value by trading on these differences.<sup>70</sup> Therefore, the role of the state should be restricted to maintaining a simple set of background rules to bolster the liberty of contract, enforceability of private proprietorship, marketability of property titles, and predictability of the adjudicatory process.<sup>71</sup>

To protect the *autonomy* of economic agents, neoliberals advocate for the establishment of neutral non-discrimination rules that eliminate the formal racial or gender constraints on consumer free choice. Milton Friedman saw an individual’s

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<sup>66</sup> See *id.* at 2 (defining neoliberalism as “a theory of political-economic practices proposing that human well-being can be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade. The role of the state is to create and preserve the institutional framework.”).

<sup>67</sup> See KARL POLANYI, *THE GREAT TRANSFORMATION* (1944) (characterizing modern capitalism as a particular set of ideologies and institutions that establish the realm of the economy as “dis-embedded” from society and autonomous from the state).

<sup>68</sup> See Matěj Vančura, *Polanyi’s Great Transformation and the Concept of the Embedded Economy*, IES OCCASIONAL PAPER, NO. 2/2011, CHARLES UNIV. INST. OF ECON. STUD. (2011).

<sup>69</sup> See, e.g., Mario Seccareccia, *Critique of Current Neoliberalism from a Polanyian Perspective—Politics, Philosophy, and Economics*, 41 INT’L J. POLIT. ECON. 3, 4 (2013).

<sup>70</sup> See JASON BRENNAN, *WHY NOT CAPITALISM?* 90, 92 (2014). See also Andrew Lister, *The Difference Principle, Capitalism, and Property-Owning Democracy*, 5 MORAL PHILOS. & POL. 151 (2018).

<sup>71</sup> See Britton-Purdy, Grewal, Kapczynski & Rahman, *supra* note 38, at 1795 (“Laissez-faire thought envisioned the economy as a self-subsistent domain of freedom, in which individuals could organize their affairs through a few relatively simple principles of property and contract.”).

market freedom as a prerequisite for her exercise of political freedoms.<sup>72</sup> Since one's freedom to choose how to consume and produce as autonomous market agents is integral to her freedom to associate and express, constraints on her abilities to consume or produce are necessarily limitations on her civic aspirations and capabilities.<sup>73</sup> From a philosophical standpoint, discrimination is unjust in that it punishes individuals not based upon their conduct, but upon immutable personal traits that were predetermined at birth—an offense to neoliberalism's individualist sensibility.<sup>74</sup> Viewed from the prism of neoliberal economics, discrimination is inefficient and suboptimal because it acts as a form of undue social influence on the market's pricing and allocation of economic resources; it rewards unqualified individuals while denying economic opportunities to those who can best activate the resources' potentials.<sup>75</sup> Thus, discrimination is not only injurious to the impacted consumer, but also harmful to business and market competition in general.<sup>76</sup> A well-functioning, influence-free market will incentivize services-and-goods providers to eradicate irrational racial or gender constraints that prevent the market from fulfilling its natural function in optimizing resource allocation.

Thus, for neoliberals, consumers cannot be powerless against business corporations in a free and transparent market.<sup>77</sup> Where price signals are neutral and information flows are efficient, consumers possess the requisite free choice and market alternatives to be the masters of their own desires—*i.e.*, as autonomous sovereign agents of the economy.<sup>78</sup> An autonomous consumer has an equal footing against all other market participants—be it producers, suppliers, or market intermediaries—because she alone possesses the information of best resource-use and trades on such information via engaging in market transactions.<sup>79</sup> Her

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<sup>72</sup> See FRIEDMAN, *supra* note 56.

<sup>73</sup> See generally ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA (1974).

<sup>74</sup> See DAVID BOAZ, THE LIBERTARIAN MIND: A MANIFESTO FOR FREEDOM 93 (2015) (“The positive basis of libertarian social analysis is methodological individualism, the recognition that only individuals act. The ethical or normative basis of libertarianism is respect for the dignity and worth of every (other) individual.”).

<sup>75</sup> See generally LAW AND ECONOMICS OF DISCRIMINATION (John J. Donohue III ed., 2014). See also Richard A. Posner, *An Economic Analysis of Sex Discrimination Laws*, 56 U. CHI. L. REV. 1311, 1320-21, 1334 (1989).

<sup>76</sup> See John J. Donohue III, *Further Thoughts on Employment Discrimination Legislation: A Reply to Judge Posner*, 136 U. PA. L. REV. 523, 551 (1987) (arguing that employers and businesses are actually hurt by their discriminatory preferences in that their net profit would have been higher had they not engaged in discrimination). See also Donohue, *The Law and Economics of Antidiscrimination Law*, NAT'L BUR. ECON. RES. (NBER) WORKING PAPER NO. 11631, at 10 (2005).

<sup>77</sup> See CHRISTOPHER PAYNE, THE CONSUMER, CREDIT AND NEOLIBERALISM: GOVERNING THE MODERN ECONOMY 1, 2 (2012) (“For neoliberals, the idea that consumers were weak in the face of businesses and large corporations was almost offensive.”)

<sup>78</sup> See *id.* at 3-4.

<sup>79</sup> This theory is the result of a convergence of two parallel intellectual developments in economic philosophy and organizational economics. In economic philosophy, F.A. Hayek is the first

consumption decisions play a key role in ensuring that resources circulating in the market are optimally allocated to enterprises that provide the best products and services to satisfy her needs.<sup>80</sup> Thus, consumption, just like production, came to be viewed as a countervailing force to protect the integrity of free markets and an engine for economic growth (and, by extension, poverty reduction).

Consequently, from the 1970s to the present day, unfettered access to credit came to be seen as an intrinsic good. Consumers are encouraged to spend beyond their savings by incurring debt. Banks are mandated to offer cheap channels to credit as long as they satisfied the minimum obligations to ascertain the consumers' abilities to repay.<sup>81</sup> Yet, once triggered by exogenous shocks causing a failure to repay, a consumer who takes on excessive debt is viewed as financially irresponsible.<sup>82</sup> A default of loan obligations is not only a blemish on a consumer's financial resume affecting her future abilities to secure loans; it is also a forfeiture of her personal property (if secured by a lien) and a moral censure of her lack of self-restraint and inability to decide what is best for herself as an autonomous sovereign agent. Whether planned or unforeseen, an event of default justifies the creditor's intrusion upon the consumer's protected sphere of autonomy.<sup>83</sup> Against the backdrop of neoliberal individualism, regulators reimagined the role of banks in the consumer economy as merely that of a market facilitator: providing convenient access to credit, refraining from blatant discrimination, and preserving the consumers' formal rights to bargain.

### B. *How Neoliberalism Became Entrenched in Credit Regulation*

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economist to clearly frame the issue of how to make best use of distributed knowledge. See F.A. Hayek, *Economics and Knowledge*, 4 *ECONOMICA* 33, 54 (1937); Hayek, *The Use of Knowledge in Society*, in *INDIVIDUALISM AND ECONOMIC ORDER* 77-78 (1948). In organizational economics, the notion of dispersed knowledge being the anchor for efficient markets finds origin in Ronald Coase's theory of transactional costs. See Ronald Coase, *The Nature of the Firm*, 4 *ECONOMICA* 386 (1937). A later paper by Herbert Simon formalized Coase's theory and argued that dispersed knowledge economy to be simultaneously a challenge and a check on authority relations. See Herbert A. Simon, *A Formal Theory of the Employment Relationship*, 19 *ECONOMETRICA* 293 (1951). For a detailed discussion comparing Hayek and Coase, see Nicolai J. Foss, '*Coase vs Hayek*': *Economic Organization and the Knowledge Economy*, 9 *INT'L J. ECON. BUS.* 9, 14-15 (2002).

<sup>80</sup> See PAYNE, *supra* note 77, at 1.

<sup>81</sup> See *id.* On the federal level, the genesis of ability-to-repay rules traces their roots back to the early 2000s, much later than the neoliberal takeoff in the 70s. See Patricia A McCoy & Susan M. Watcher, *Why the Ability-to-Repay Rule is Vital to Financial Stability*, 108 *GEO. L.J.* 649, 660 (2020).

<sup>82</sup> See Michael D. Sousa, *Debt Stigma and Social Class*, 41 *SEATTLE U. L. REV.* 965, 966-71 (2018).

<sup>83</sup> On psychological and physiological dimensions, debt bondage also generates negative intrusive impacts on the consumer's bodily autonomy. See Elizabeth Sweet, L. Zachery DuBois & Flavia Stanley, *Embodied Neoliberalism: Epidemiology and the Lived Experience of Consumer Debt*, 48 *INT'L J. HEALTH SERV.* 495, 511 (2018) (pointing out the influence of neoliberal ideology in shaping emotional responses to debt and suggesting that these responses may be important pathways through which debt affects population health).

## 1. Race, Civil Rights, and Shifting Congressional Views of Credit

As the intellectual confluence between laissez-faire economics and civil rights took place in the academe, a parallel shift occurred in the major legal arenas. In legislative debates and regulatory meetings, the neoliberal ideals of free market and consumer autonomy gradually rose to dominance and crowded out the more radical legal alternatives. Over the span of three decades, these ideals found their legal embodiments in various statutes, rules, and regulations governing the supply and distribution of credit.<sup>84</sup> The effect of this neoliberal takeover was transformative: it reshaped the landscape of credit provision by encouraging high-risk consumer lending and remolded the relations of credit underwriting by allowing creditors to shift the costs of business to the borrowers.<sup>85</sup> Through the pervasive language of individual responsibility, neoliberalism enabled the systematic dilution of consumer power vis-à-vis the lending businesses.<sup>86</sup>

This profound legal transformation from the 1970s to the 2000s occurred in the setting of a major congressional paradigm shift regarding what the proper role of credit in a market society ought to be. Before the 1970s, credit underwriting was congressionally uncharted waters governed by a fractured regime of state laws, industry norms, and banking customs.<sup>87</sup> Each state had some form of legislation limiting the size of loans or the maximum interest rate chargeable to a consumer account.<sup>88</sup> But, beyond the narrow contexts of loan size and usury limits, “the decision as to whom credit should be granted has traditionally been one for the creditor to make unhampered by government regulation.”<sup>89</sup> The dominant practice

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<sup>84</sup> It’s noteworthy that there is no unified, overarching consumer protection legislation in the U.S. Instead, the emphasis has been a series of separate laws targeting specific business practices, industries, and consumer financial products. Federal-level consumer protection legislation began with the passage of the Consumer Credit Protection Act of 1968 (CCPA). The CCPA is an umbrella statute that laid the foundations for and incorporated other consumer financial protection laws, including Truth in Lending Act (TILA) (originally part of CCPA), Fair Credit Billing Act (FCBA), Fair Credit Reporting Act (FCRA), Credit Repair Organizations Act (CROA), Equal Credit Opportunity Act (ECOA), and Fair Debt Collection Practices Act (FDCPA). *See* SOEDERBERG, *supra* note 17, at 84.

<sup>85</sup> *See id.* at 69-156.

<sup>86</sup> *See id.* at 242-47.

<sup>87</sup> *See* ANNE FLEMING, *CITY OF DEBTORS: A CENTURY OF FRINGE FINANCE* 214 (2018) (“Congress had largely ceded authority over the regulation of consumer credit to the states—until 1968, when it passed the Truth in Lending Act.”)

<sup>88</sup> Usury laws, effective in nearly every state, specified the maximum interest rate which may be charged legally. States also had laws patterned after the Uniform Small Loan Act to govern loans not exceeding a statutorily prescribed amount. *See generally* BARBARA CURRAN, *TRENDS IN CONSUMER CREDIT LEGISLATION* (1965).

<sup>89</sup> James A. Burns, Jr., *An Empirical Analysis of the Equal Credit Opportunity Act*, 13 U. MICH. J. L. REFORM 102, 108 (1979).



among creditors in the 1960s was to consider the “three C’s of credit”—*i.e.*, the character, capacity, and capital of the applicant—as primary factors impacting their decisions to accept or deny application for credit.<sup>90</sup> A popular credit underwriting manual in 1961 instructed creditors to label divorcees, Indigenous peoples, and those living in “untidy homes” or a “rundown neighborhood” as having poor credit risks.<sup>91</sup> In 1970, the Federal Trade Commission (FTC) conducted a study of major consumer finance companies and found that collecting racial information remained a standard practice.<sup>92</sup> In essence, pre-1970s lending was primarily a “relationship business” anchored in kinship ties and social networks of the community.<sup>93</sup> Animus and bias in lending largely escaped governmental detection because credit decisions were done informally based on face-to-face assessments.<sup>94</sup>

When Congress initially contemplated federal legislation for systematic credit reporting and fair lending in 1968,<sup>95</sup> credit was narrowly imagined to be merely a financial resource—it was economically vital for poverty reduction, but devoid of greater social meaning.<sup>96</sup> The prevailing congressional view was that credit is only relevant to consumption and entrepreneurship, which Congress deemed to be important channels of wealth accumulation to foster a robust American working class.<sup>97</sup> At the time, Congress’s drive to expand credit access through federal

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<sup>90</sup> See *id.* at 108.

<sup>91</sup> See MORRIS R. NEIFELD, NEIFELD’S MANUAL ON CONSUMER CREDIT 501, 512 (1961).

<sup>92</sup> See Louis Hyman, *Ending Discrimination, Legitimizing Debt: The Political Economy of Race, Gender, and Credit Access in the 1960s and 1970s*, 12 ENTERPRISE & SOCIETY, 200, 224 (2011).

<sup>93</sup> The most successful banks were those at the center of a community’s social structure, who had relationships with local businesses and capitalized on informal kinship ties. See MEHRSA BARADARAN, *THE COLOR OF MONEY: BLACK BANKS AND THE RACIAL WEALTH GAP 195-96* (2017).

<sup>94</sup> See *id.* at 195.

<sup>95</sup> Credit reporting was established in the late 1960s while fair lending was established in early 1970s. Congresswoman Lindy Boggs (D-Louisiana), who was elected to Congress in 1972, noted in her memoir that when the Congressional Banking Committee met to draft an early ECOA bill that would protect credit discrimination on racial, color, national origin, age, and religious grounds, she added “sex and marital status” to the list of protected characteristics. See LINDY BOGGS & KATHERINE HATCH, *WASHINGTON THROUGH A PURPLE VEIL: MEMOIRS OF A SOUTHERN WOMAN 277-78* (1994). In 1974, Congresswoman Leonor Sullivan (D-Missouri), a member of the House Banking and Currency Committee, introduced a bill that aimed to move consumer financial protection in that direction. See H.R. 14856, 93d Cong. (1974). See also Taylor, *supra* note 55, at 598.

<sup>96</sup> See The Economic Opportunity Act of 1964 (EOA), Pub. L. 88-452, 78 Stat. 508 (1964) (“An act to mobilize the human and financial resources of the Nation to combat poverty[.]”). The Equal Credit Opportunity Act of 1974, which extended congressional vision of poverty reduction in EOA to the ever-expanding field of consumer credit, retained the same language and understanding of credit as a financial resource.

<sup>97</sup> *Id.* at 508. Section 2 of the EOA, entitled “findings and declaration of purpose,” states as follows: “Although the economic well-being and prosperity of the United States has progressed... poverty continues to be the lot of a substantial number of our people... It is, therefore, the policy of the United States to eliminate the paradox of poverty in the midst of plenty in this Nation by opening to everyone the opportunity for education and training, the opportunity to work, and the opportunity

legislation coincided with two national interests. Economically, stimulating credit demand helped finance local infrastructure development and spread banking presence to previously underbanked communities. This endeavor was consistent with Congress's framing of credit as a solution to the rising urban poor.<sup>98</sup> Ideologically, democratizing credit access helped dilute and divert working-class interest in socialism. Credit therefore also played an instrumental role in America's battle to win the Cold War at home.<sup>99</sup> Nevertheless, despite credit's centrality to the American liberal-democratic project, lawmakers had a limited conception of credit as a mere market instrument.

As the landscape of credit provision changed in the 1970s, credit started to carry a more salient social meaning beyond poverty reduction. On the demand side, the stagnation of wages and inflationary pressures in the 1970s drove up the cost of living, turning debt-based consumption into a market imperative.<sup>100</sup> Consequently, banks had to increase their credit supply. By the mid-decade, "credit has ceased to be a luxury item, either for consumers or for business entrepreneurs."<sup>101</sup> It became necessary for anyone hoping to purchase essential goods and services.<sup>102</sup> On the supply side, credit unions and community thrifts started to prioritize profit over servicing the poor in order to stay alive—both due to the high-risk nature of lending in underdeveloped communities and competition with the emerging "too-big-to-fail" banks.<sup>103</sup> These changes in the institutional structures of credit provision in the 1970s made borrowing an essential component of the everyday consumer experience in working-class America.

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to live in decency and dignity." The EOA was one of the landmark legislations of the War on Poverty and Great Society welfare programs. Fair lending laws such as ECOA were part of the legislative and executive endeavor to extend the mid-1960s Great Society programs to the provision of credit. See Procaccini, *supra* note 55, at S46 n.14.

<sup>98</sup> See *id.* at 73-75.

<sup>99</sup> See MEHRSA BARADARAN, *HOW THE OTHER HALF BANKS: EXCLUSION, EXPLOITATION, AND THE THREAT TO DEMOCRACY* 73 (2015).

<sup>100</sup> See generally Alan S. Blinder, *The Anatomy of Double-Digit Inflation in the 1970s*, in *INFLATION: CAUSES AND EFFECTS* 261 (Robert E. Hall ed., 1982).

<sup>101</sup> S. REP. NO. 94-589, at 3 (1976).

<sup>102</sup> See *id.* ("Virtually all home purchases are made on credit. About two-thirds of consumer automobile purchases are on an installment basis. Large department stores report that 50% or more of their sales are on revolving or closed-end credit plans. Upward of 15% of all consumers disposable income is devoted to credit obligations other than home mortgages.")

<sup>103</sup> See BARADARAN, *supra* note 99, at 76. Although bank mergers picked up during the 1970s, probably in response to amendments to the Bank Holding Company Act (1970) and to bank holding company legislation at the state level, the height of bank merger activity took place from 1980 to 1994. See Stephen A. Rhoades, *Bank Mergers and Industrywide Structure, 1980-94*, FEDERAL RESERVE STAFF STUDIES 142, at 3 (1996). The first "too-big-to-fail" bank bailout occurred in 1972, when bank regulators bailed out the \$1.2 billion Bank of the Commonwealth. See George C. Nurisso & Edward S. Prescott, *The 1970s Origins of Too Big to Fail*, FEDERAL RESERVE BANK OF CLEVELAND ECONOMIC COMMENTARY 2017-17 (Oct. 18, 2017).

But the expansion of credit was also unequal: the 1970s marked the emergence of a credit apartheid that segregated the American consumer population. Although the rise of banking made borrowing easy for the suburban white middle class, credit remained a luxury for African Americans who made up a large percentage of the urban poor.<sup>104</sup> For those living in the ghettos, their credit experiences were more akin to the world of the 1920s: “Ghetto retailers kept their accounts in leather-bound ledgers and collected payments door-to-door, rather than mainframes that billed automatically like suburban retailers. Credit cards were nonexistent.”<sup>105</sup> As Congress reviewed the causes for social unrest in the ghettos, it found the absence of credit to be among the core causes.<sup>106</sup> The Commission on Civil Disorders, formed to investigate the 1968-70s ghetto riots, found that a common sentiment among African Americans was that they were “exploited by white society.”<sup>107</sup> The Senate Committee on Banking and Currency reached a similar conclusion.<sup>108</sup> By the mid-70s, credit inequality had become an urgent issue of social stability that Congress could not afford to ignore. It also necessitated new theories of credit to justify the simultaneous omnipresence and absence of credit in America.

For Congress, the meaning of credit began to shift as the incipient signs of merger between civil rights and free markets burgeoned. When ECOA was enacted in 1974, it only forbade discrimination on the basis of sex and marital status.<sup>109</sup> In less than a year, racial equality became the bedrock of consumer financial protection. In 1975, Congress referred to the social and dignitarian dimensions of credit access as a basis for legislating an amendment to expand the list of protected characteristics in ECOA.<sup>110</sup> The House Committee on Banking, Currency, and Housing, quoting the U.S. Commission on Civil Rights, stated the following:

It would be difficult to exaggerate the role of credit in our society. Credit is involved in almost endless variety of transactions reaching from the medical delivery of the newborn to the rituals associated with the burial of the dead. The availability of credit often determines an individual’s effective range of social choice and influences such basic life matters as selection of occupation and housing. Indeed, the availability of credit has a profound impact on an *individual’s ability* to exercise the *substantive civil rights* guaranteed by the Constitution.<sup>111</sup>

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<sup>104</sup> See Hyman, *supra* note 92, at 200-01.

<sup>105</sup> *Id.* at 201.

<sup>106</sup> See *id.* at 204.

<sup>107</sup> *Id.* See also U.S. KERNER COMMISSION, REPORT OF THE NATIONAL ADVISORY COMMISSION ON CIVIL DISORDERS 274 (1968).

<sup>108</sup> See Hyman, *supra* note 92, at 206-07.

<sup>109</sup> See *id.* at 225.

<sup>110</sup> See Taylor, *supra* note 55, at 631.

<sup>111</sup> H.R. REP. NO. 94-210, at 3 (1975) (emphasis added).

This notion—that unrestrained credit access undergirds consumer autonomy—embodied the consensus that Congress reached after a decade-long ordeal to grapple with the simultaneous ubiquity of credit and the scarcity of credit opportunities for the urban poor.<sup>112</sup> It garnered traction because it resolved two social tensions. *First*, reimagining credit as a vehicle for social choice and opportunity enabled Congress to pay lip service to remediating racial redlining and other forms of historical economic injustice.<sup>113</sup> Meanwhile, the “credit-as-opportunity” framework legitimized the federal government’s divestiture from welfare programs and delegation of poverty reduction to private credit-underwriting institutions.<sup>114</sup> Credit was reframed as the private-sector alternative to the welfare state.<sup>115</sup> *Second*, recasting credit access as a precondition for the meaningful exercise of civil rights allowed Congress to placate persistent anger arising from the ghetto riots and alleviate social angst by promising racial uplift through incorporating minorities into the market-oriented status quo.<sup>116</sup> It muted cries for radical redistribution and redirected social momentums for change into the conformist forums of community investment, black capitalism, women’s entrepreneurship, and minority-owned free enterprise.<sup>117</sup>

## 2. Displacement of Public Regulation by Private Enforcement

The crossover between credit and civil rights had profound impacts on the framing of mainstream legislative responses since the mid 70s—it redirected the focus of credit legislation from poverty reduction to expanding the scope of anti-discrimination and providing unfettered access to banking services. For instance,

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<sup>112</sup> See Hyman, *supra* note 92, at 202.

<sup>113</sup> See, e.g., Charles L. Nier III, *Perpetuation of Segregation: Toward a New Historical and Legal Interpretation of Redlining under the Fair Housing Act*, 32 J. MARSHALL L. REV. 617, 627 n.72 (1999); Willy E. Rice, *Race, Gender, “Redlining,” and Discriminatory Access to Loans, Credit, and Insurance: A Historical and Empirical Analysis of Consumers Who Sued Lenders and Insurers in Federal and State Courts, 1950-1995*, 33 SAN DIEGO L. REV. 583 (1996).

<sup>114</sup> See Gunnar Trumbull, *Credit Access and Social Welfare: The Rise of Consumer Lending in the United States and France*, 40 POLITICS & SOCIETY 3, 20 (2012).

<sup>115</sup> See *id.* at 28.

<sup>116</sup> See Hyman, *supra* note 92, at 203-13.

<sup>117</sup> This does not suggest that the regulatory shift towards minority-owned business or black capitalism was either smooth or homogenous. Some individuals who were working within the federal government, including the first black governor of the Federal Reserve Andrew Brimmer, denounced the ideas of black capitalism and minority-owned business. Brimmer doubted if creating a separate self-circulating economy in minority communities could meaningfully solve the chronic problem of race-based economic inequality. Brimmer argued that “the only really promising path to equal opportunity...lies in full participation in an integrated, national economy. It cannot be found in a backwater of separation and segregation.” See MEHRSA BARADARAN, *THE COLOR OF MONEY: BLACK BANKS AND THE RACIAL WEALTH GAP* 201 (2017).

subsequent amendments to ECOA almost exclusively revolved around adding new categories to the list of protected characteristics, bolstering consumers' procedural rights, and adjusting the creditors' disclosure obligations. The 1976 amendment added "race, age, color, religion, national origin, the recipient of public assistance income, and the exercise of legal rights under the Consumer Credit Protection Act" to the original categories of "sex and marital status" as criteria prohibited from consideration in the credit underwriting process.<sup>118</sup> The Women's Business Ownership Act of 1988, which contained amendments to ECOA, imposed additional disclosure obligations on creditors to (1) give formal written notice to applicants of business credit about reasons of credit denial and (2) retain records for business credit applications for at least a year.<sup>119</sup> The 1991 amendment heightened creditors' disclosure obligations regarding residential mortgage lending and broadened the jurisdiction of federal agencies to reach foreign banks.<sup>120</sup> The 1996 amendment relaxed creditors' disclosure obligations by granting privilege to "self-tests" conducted by creditors to determine their compliance with ECOA, preventing such tests from civil or administrative discovery.<sup>121</sup> The 2003 revision to Regulation B, which implements ECOA, imposed an "adverse action" notice<sup>122</sup> requirement on creditors to deliver written explanations to consumers when they make any credit decisions adversely affecting consumers' rights under ECOA.<sup>123</sup> Similarly, amendments to the Fair Housing Act (FHA) in 1974, 1988, and 1996

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<sup>118</sup> See Burns, *supra* note 89, at 106. See also 15 U.S.C. § 1691(a) (1976).

<sup>119</sup> See FRB, Federal Reserve Board Amends Regulation B, 12 C.F.R. 202, Dkt. R-0671, at 3 (Dec. 1, 1989), <https://www.occ.treas.gov/static/ots/bulletins/rescinded-thrift-bulletins/ots-tb-40.pdf>. See also National Consumer Law Center (NCLC), *Credit Discrimination: 1.3.2.4 Women's Business Ownership Act of 1988*, NCLC DIGITAL LIBRARY (last accessed Apr. 4, 2023), <https://library.nclc.org/book/credit-discrimination/1324-womens-business-ownership-act-1988>

<sup>120</sup> See NCLC, *Credit Discrimination: 1.3.2.5 1991 Amendments*, NCLC DIGITAL LIBRARY (last accessed Apr. 4, 2023), <https://library.nclc.org/book/credit-discrimination/1325-1991-amendments>

<sup>121</sup> See FTC, *FTC Supports Federal Reserve Board's Proposed Revisions that Would Implement Recent Amendments to the Equal Credit Opportunity Act*, FTC PRESS RELEASE (Feb. 6, 1997), <https://www.ftc.gov/news-events/news/press-releases/1997/02/ftc-supports-federal-reserve-boards-proposed-revisions-would-implement-recent-amendments-equal>

<sup>122</sup> Regulation B defines "adverse action" as: "(1) A refusal to grant credit in substantially the amount or on substantially the terms requested in an application unless the creditor makes a counteroffer (to grant credit in a different amount or on other terms), and the applicant uses or expressly accepts the credit offered; (2) A termination of an account or an unfavorable change in the terms of an account that does not affect all or substantially all of a class of the creditor's accounts; or (3) A refusal to increase the amount of credit available to an applicant who has made an application for an increase." See 12 C.F.R. § 1002.2(c)(1). See also Sarah Ammermann, *Adverse Action Notice Requirements Under the ECOA and the FCRA*, CONSUMER COMPLIANCE OUTLOOK (2013), <https://www.consumercomplianceoutlook.org/2013/second-quarter/adverse-action-notice-requirements-under-ecoa-fcra/#footnotes>

<sup>123</sup> See James A. Huizinga & Krista B. LaBelle, *Amendments to Regulation B and the Official Staff Commentary*, 59 BUS. LAW. 1137, 1138 (2004).

mostly centered on heightening creditors' disclosure obligations and consumers' procedural rights—changes that largely mirrored amendments to ECOA.<sup>124</sup>

One reason for the growing legislative emphasis on disclosure and equal protection rights is that Congress increasingly pushed for private litigation as the principal means to vindicate consumers' rights under the fair lending laws.<sup>125</sup> When ECOA was originally legislated in 1974, Congress employed a dual enforcement model—allocating rulemaking power to the Federal Reserve Board (FRB) while delegating the power to bring enforcement actions to the FTC.<sup>126</sup> But, beginning with the 1976 amendment, Congress has gradually replaced the dual enforcement model with one that was centered on civil lawsuits.<sup>127</sup> Subsequent amendments raised the punitive damage ceiling but set up stricter constraints on the federal agencies' substantive rulemaking power. Agencies were granted discretion to implement procedural safeguards protecting consumers' right to know and creditor's duty to inform. But their authority to craft rules identifying and prohibiting new harmful lending practices had shrunk dramatically from 1976 to 2000s.<sup>128</sup> These legislative changes were designed to elevate private enforcement and relegate public enforcement to a secondary role; they created a legal regime which subsumed consumer welfare into the discourse of individual rights.

However, despite the dominance of the individual rights model, empirics on private enforcement show that consumer welfare has not been meaningfully improved from 1970s to 2000s. Although Congress intended that private lawsuits

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<sup>124</sup> See Michael H. Schill & Samantha Friedman, *The Fair Housing Amendments Act of 1988: The First Decade*, 4 CITYSCAPE: J. POL'Y DEV. & RES. 57 (1999). See also NCLC, *Credit Discrimination: 1.4 The Fair Housing Act (FHA)*, NCLC DIGITAL LIBRARY (last accessed Apr. 4, 2023), <https://library.nclc.org/book/credit-discrimination/142-history>

<sup>125</sup> See, e.g., Walter Gorman, *Enforcement of the Equal Credit Opportunity Act*, 37 BUS. LAW. 1335, 1336 (1982); John R. Walter, *The Fair Lending Laws and Their Enforcement*, 81 ECON. Q. 61 (1995).

<sup>126</sup> See John H. Matheson, *The Equal Credit Opportunity Act: A Functional Failure*, 21 HARV. J. ON LEGIS. 371, 375-77 (1984). Eleven other federal agencies shared limited authority with the Federal Trade Commission on matters relating to enforcement action.

<sup>127</sup> The 1976 amendment initially retained the dual enforcement model. It authorized the U.S. Attorney General to institute civil proceedings in two circumstances. First, federal agencies responsible for enforcement of ECOA could refer matters to the Attorney General for litigation. Second, the Attorney General could independently commence civil proceedings to prohibit or remedy ECOA violations on behalf of a class or private individuals. See *id.* at 376.

<sup>128</sup> For instance, since 1938 the FTC has had the power pursuant to § 5 of the Federal Trade Commission Act (FTCA) to regulate “unfair and deceptive acts and practices.” In 1980, in response to considerable controversy during the Carter Administration regarding the use of its authority to regulate unfair practices—a controversy that led Congress for a brief period of time to defund the FTC—the Commission issued a “Policy Statement.” The FTC’s 1980 Policy Statement set up a three-prong standard restraining its own power to proscribe rules to identify and prohibit practices that are “unfair” under the FTCA. See FTC, POLICY STATEMENT ON UNFAIRNESS (Dec. 17, 1980). Congress later amended the FTCA to incorporate the specific standard articulated by the FTC’s 1980 Policy Statement. See 15 U.S.C. § 45(n).

to be the cornerstone of enforcement, the fair lending laws had spawned surprisingly little litigation. For a statute promising to eradicate credit discrimination and protect civil rights, ECOA has invited fewer than 50 cases in the decade since its enactment<sup>129</sup>—fewer than the number of cases brought under the Truth in Lending Act (TILA) per *month*,<sup>130</sup> and far fewer than the number of employment discrimination cases filed per *week* under Title VII.<sup>131</sup> This individualist regime created by Congress may have even contributed to the exacerbation of credit inequality, since the congressional steering towards private litigation was accompanied by the amputation of federal agencies’ substantive rulemaking capacity.

It is not hard to see why an individual rights model centering on private enforcement could end up hurting individual consumers and groups. Among its many flaws,<sup>132</sup> the most critical failures of this regime are twofold. *First*, the emphasis on disclosure and equal protection marginalized questions about bargaining power disparity—*i.e.*, the most central causes of transactional inequality. A creditor’s good faith compliance with proper underwriting procedure and standardized forms immunizes her from liability.<sup>133</sup> Under ECOA, once a creditor satisfied her “adverse action” notice requirements to “clearly explain” reasons for denying the consumer’s credit application and demonstrated that race or gender played no part in the creditor’s decision-making, the consumer’s right to legally contest the fairness of that transaction is extinguished.<sup>134</sup> After a consumer “consents” to a credit transaction—either by actual consent or constructive consent by virtue of sufficient disclosure—the consumer is responsible for all consequences flowing from that transaction. The fact that she is desperate, materially deprived, lacks a viable alternative, or the terms being exploitative became irrelevant to the

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<sup>129</sup> See Matheson, *supra* note 126, at 377. See also ATT’Y GEN. REP. TO CONGRESS PURSUANT TO THE EQUAL CREDIT OPPORTUNITY ACT AMENDMENTS OF 1976, at 4 (1981) (“Although the [ECOA Amendments] ha[ve] now been in effect for more than five years, we know of only 29 private cases being brought under it.”).

<sup>130</sup> See FREDERICK H. MILLER & BARKLEY CLARK, CASES AND MATERIALS ON CONSUMER PROTECTION 199 (1980) (“There have been to date some 14,000 lawsuits [under TILA].”) See Matheson, *supra* note 126, at 377, n.29.

<sup>131</sup> In 1983, for instance, over 8,000 employment discrimination cases have been filed in federal courts. The weekly average was over 150. Over 47,000 charges were filed with the Employment Equal Opportunity Commission in 1973. By 1983, the number of employment discrimination charges filed with the Commission had increased to 112,000 annually. See Matheson, *supra* note 126, at 377, n.30.

<sup>132</sup> Other flaws include onerous evidentiary burdens for alleging a violation, the lack of a minimum statutory damage, and having too short of a statute of limitations period. But these flaws are mostly technical and procedural. They could be fixed and were in fact fixed in many of Congress’s subsequent amendments. See *id.* at 378.

<sup>133</sup> See generally FDIC, FAIR LENDING LAWS AND REGULATIONS (Mar. 2021).

<sup>134</sup> See Ammermann, *supra* note 122.

considerations of justice. *Second*, any enforcement regime that depends on private parties commencing an action in court necessarily shifts the cost of compliance from creditors and regulators to consumers. An applicant who wishes to dispute the fairness of a credit transaction bears the burden of proving actual damages, garnering evidence, and hiring legal counsel—resource-intensive and time-costly activities that one must engage if she seeks legal redress. Obviously, “consumers who are denied credit by large creditors may not assert their rights because of institutional formidability.”<sup>135</sup> Conversely, “unsuccessful applicants for credit from small, local credit-granting businesses may not assert their rights because they fear reprisal or do not wish to alienate the creditor.”<sup>136</sup> Yet, the irony of private enforcement is that the poorest and most precarious consumers—*e.g.*, minorities, women, immigrants, and other status-subordinated people who are most in need of protection—are typically the ones who are barred from asserting their interests in the current legal regime.<sup>137</sup>

### C. Contemporary Neoliberal Legal Response to Credit Inequality

At its core, the contemporary neoliberal legal paradigm can be characterized as a series of commitments to the individual rights model, implemented by statutes protecting the autonomy of markets and delegating public functions to private enforcement. These commitments became entrenched into the regulatory consciousness due to historical path-dependencies set from the 1970s to the 2000s, which elevated free market and consumer autonomy ideals above their normative alternatives. Through consistent government-led initiatives of de-regulation, divestiture, and privatization, the once-contested notions of free market and consumer autonomy became self-fulfilling prophecies that further justified the entrenchment of neoliberalism into the lawmaking and policymaking processes.

Today, the mainstream legal responses to credit inequality have coalesced into a consistent regulatory strategy informed by neoclassical law-and-economics.<sup>138</sup> This strategy consists of two components: (1) elevating cost-benefit analysis above other modes of policy inquiry; and (2) conditioning substantive regulation upon a

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<sup>135</sup> See Matheson, *supra* note 126, at 380.

<sup>136</sup> *Id.*

<sup>137</sup> The impact of private enforcement in widening income disparities and barring the poor from legal redress has been well-studied by legal scholars. See generally Luke P. Norris, *The Promise and Perils of Private Enforcement*, 108 VA. L. REV. 1483 (2022); Eloise Pasachoff, *Special Education, Poverty, and Limits of Private Enforcement*, 86 NOTRE DAME L. REV. 1413 (2011) (discussing the disparities in private and public enforcement of Individuals with Disabilities Education Act for the poor); Scott Ilgenfritz, *The Failure of Private Actions as an ECOA Enforcement Tool: A Call for Active Governmental Enforcement and Statutory Reforms*, 36 FLA. L. REV. 447 (1984).

<sup>138</sup> See Britton-Purdy, Grewal, Kapczynski & Rahman, *supra* note 38, at 1794-1800.



finding of “market failure.” No matter *what* type of credit is being regulated, *how* it injures consumers, or *where* the locus of harm lies, federal agencies in charge of administering the consumer financial laws would follow these two strategies drawn straight out of the neoliberal rulebook. The following paragraphs explain the logic of each strategic component and their current legal manifestations.

### 1. Elevating Cost-Benefit Analysis Above Other Inquiries

The vast literature on cost-benefit analysis concerns how regulators should exercise their discretion in crafting rules to address social and economic harms in markets.<sup>139</sup> As a mode of policy inquiry deriving regulatory insight from the intake of open market data, cost-benefit analysis promises to rationalize policymaking, reduce regulatory bias, and enhance administrative accountability.<sup>140</sup> Neoliberals tout cost-benefit analysis as the preferred mode of regulatory inquiry because they see it as “value-free” and anchored in rigorous analysis of market data—*i.e.*, data produced by market processes that are dis-embedded from extrinsic social or governmental influences disrupting the market’s capacity to optimize and self-correct. Doctrinally, the debate over cost-benefit analysis has revolved around whether judicial review of agency action can and should require cost-benefit analysis as part of the court’s standard of review.<sup>141</sup> Such debates often concern drawing lines between administrative expertise and power abuse.

While the proliferation of cost-benefit analysis in policymaking and judicial review has no doubt revolutionized the administrative process, it also made the process much more conciliatory and conformist—especially compared to policymaking in the pre-1970s regulatory landscape. Admittedly, proponents of cost-benefit analysis are right to point out that this regulatory paradigm shift starting in the 1970s have positive outcomes for making the once-opaque process of policymaking more open and contestable to public opinion, particularly in the context of notice-and-comment rulemaking.<sup>142</sup> But what is critical about the

<sup>139</sup> See Robert Ahdieh, *Reanalyzing Cost-Benefit Analysis: Toward a Framework of Function(s) and Form(s)*, 88 N.Y.U. L. REV. 1983, 1995-98 (2013) (describing the origins and evolution of cost-benefit analysis as a mode of policy inquiry and summarizing the relevant scholarly literature).

<sup>140</sup> See *id.* at 2010-22.

<sup>141</sup> Most debate on cost-benefit analysis in the judicial review setting centers on what the scope of agency power is under their enabling statutes and how courts should review them under the arbitrary and capricious standard of section 706(2)(A) of the Administrative Procedure Act. See, e.g., Kathryn A Watts, *Controlling Presidential Control*, 114 MICH. L. REV. 683 (2016); Jody Freeman & Adrian Vermeule, *Massachusetts v. EPA: From Politics to Expertise*, 2007 SUP. CT. REV. 51 (2007). For recent cases interpreting the arbitrary and capricious standard of judicial review as requiring a cost-benefit analysis, see, e.g., *Business Roundtable v. SEC*, 647 F.3d 1144, 1149-52 (D.C. Cir. 2011).

<sup>142</sup> See generally COST-BENEFIT ANALYSIS: ECONOMIC, PHILOSOPHICAL, AND LEGAL PERSPECTIVES (Matthew D. Adler & Eric A. Posner eds., 2001). More recent scholarship advocate for testing and interrogation of assumptions in the regulatory use of cost-benefit analyses. See Cass R. Sunstein,

neoliberal transformation is that it elevated cost-benefit analysis to the exclusion of other modes of policy inquiry—by promising to be dis-embedded, value-free, and ideologically neutral.<sup>143</sup> Policies premised on the radical redistribution of wealth and reconfiguration of market power are dismissed as advancing a subversive ideological agenda.<sup>144</sup> The elevation of cost-benefit analysis also made the presumptions of free and neutral markets uncontested in the lawmaking and policymaking forums.

But, despite its façade of neutrality, cost-benefit analysis is also value-laden and ideologically-driven. For one, numbers and statistics are highly susceptible to manipulation.<sup>145</sup> What goes into the baseline, denominators, and benchmarks of empirical comparison are conscious political choices about who can and cannot be counted as subjects of policy inquiry.<sup>146</sup> Yet, framing these conscious choices as neutral reflections of market conditions works to obscure the power relations that dictate what goes into the analysis.<sup>147</sup>

In the field of consumer credit, the hegemony of cost-benefit analysis is most saliently manifested in two legal standards codified in the core consumer financial protection statutes: (1) legal thresholds of recovery conditioned upon the balancing of interests between consumers and creditors that are inherently conflictual in the credit-underwriting process; and (2) judicial tests requiring agencies to show that the benefits of regulatory intervention outweigh the costs of disrupting the private ordering in markets.

The first—the balancing of consumer and creditor interests—is embedded in the very definition of “discrimination” under ECOA and FHA.<sup>148</sup> Under the classic

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“*We Test*”: *An Imagined Regulatory Future*, 13 J. OF COST-BENEFIT ANALYSIS 269 (2022) (arguing that cost-benefit analysis should try to reduce informational deficits through (1) the creative use of notice-and-comment rulemaking; (2) retrospective analysis of regulations and their costs and benefits; and (3) advanced testing, as a way of informing ex ante analysis).

<sup>143</sup> See THEODORE M. PORTER, *TRUST IN NUMBERS: THE PURSUIT OF OBJECTIVITY IN SCIENCE AND PUBLIC LIFE* 148-90 (1995).

<sup>144</sup> See *id.* at 153 (arguing that public decisions made through conducting cost-benefit analysis would “reduce opportunities for purely political choices.”).

<sup>145</sup> See Bent Flyvbjerg & Dirk W. Bester, *The Cost Benefit Fallacy: Why Cost-Benefit Analysis is Broken and How to Fix It*, 12 J. OF COST-BENEFIT ANALYSIS 395 (2021).

<sup>146</sup> See generally John C. Coates IV, *Cost-Benefit Analysis of Financial Regulation: Case Studies and Implications*, 124 YALE L.J. 882 (2015).

<sup>147</sup> See Todd Philips & Sam Berger, *Reckoning With Conservatives’ Bad Faith Cost-Benefit Analysis*, CENTER FOR AMERICAN PROGRESS (Aug. 14, 2020) (arguing that the conservatives have selectively used cost-benefit analysis to hide the true costs of de-regulation by ensuring that the social costs of deregulatory policies are excluded from the analysis). *But see* Careline Cecot, *Who Benefits from Cost-Benefit Analysis?* YALE J. ON REGUL. NOTICE & COMMENT (Oct. 13, 2021) (arguing that cost-benefit analysis is not easy to manipulate because the scientific community, the courts, and the public can notice what the regulators are doing when their decisions are out of the range of reasonable decisions that the data can support).

<sup>148</sup> See Burns, *supra* note 89, at 107-10.

definition of discrimination as *disparate treatment*, consumers seeking recovery are required to show that creditors undertook adverse credit actions against the consumers because of their protected characteristics (*e.g.*, race, gender).<sup>149</sup> Even under the more progressive definition of discrimination as *disparate impact*,<sup>150</sup> creditors can immunize themselves from liability if they can demonstrate that the challenged practice is (1) “necessary to achieve one or more of the substantive, legitimate, nondiscriminatory goals” of the creditor; and (2) “those [legitimate] interests could not be served by another practice that has a less discriminatory effect.”<sup>151</sup>

The second—the balancing of regulatory benefits and market costs—finds legal expression in statutory provisions governing the scope of federal agencies’ substantive rulemaking power.<sup>152</sup> The Dodd-Frank Act restrains the Consumer Financial Protection Bureau’s (CFPB) enforcement power to identify and prohibit “unfair” credit practices by conditioning regulatory action upon a finding of: (1) substantial consumer injury; (2) such injury is not reasonably avoidable by consumers; and (3) the regulatory benefits are not outweighed by the costs to the market.<sup>153</sup> Similarly, the FTC’s “unfairness” power to govern credit provision in auto-lending is also constrained by a three-prong countervailing benefits test that

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<sup>149</sup> See FRB, FAIR LENDING REGULATIONS AND STATUTES: OVERVIEW, CONSUMER COMPLIANCE HANDBOOK (2017).

<sup>150</sup> In *Texas v. Inclusive Communities*, the Supreme Court upheld the actionability of disparate impact claims under the FHA. But whether or not *Inclusive Communities* extend to ECOA is still under heated legal debate. *Texas Dep’t of Hous. & Cmty Affairs v. Inclusive Communities Project, Inc.*, 135 S. Ct. 2507 (2015). Some federal regulators have taken the stance that *Inclusive Communities* apply to ECOA. Under Regulation B, which enforces the ECOA, the Federal Reserve Board has interpreted the statute to incorporate the theory of disparate impact. See 12 C.F.R. § 1002.6(a). The FRB cited the legislative history of ECOA, including congressional committee reports as support for ECOA disparate impact liability. See 12 C.F.R. § 202 (“Congressional intent that the [disparate impact] doctrine applies to the credit area is documented in the Senate Report that accompanied H.R. 6516, No. 94-589, pp. 4-5; and in the House Report that accompanied H.R. 6516, No. 94-210, p.5.”). But this interpretation has met aggressive pushback by the banking industry. Crucially, the Supreme Court has not yet spoken on this issue.

<sup>151</sup> *Inclusive Communities*, 135 S. Ct. at 2523 (articulating the elements of a prima-facie disparate impact claim under the FHA).

<sup>152</sup> See generally CFPB, UNFAIR, DECEPTIVE, OR ABUSIVE ACTS OR PRACTICES (UDAAPS) EXAMINATION PROCEDURE (Mar. 16, 2022), [https://files.consumerfinance.gov/f/documents/cfpb\\_unfair-deceptive-abusive-acts-practices-udaaps\\_procedures.pdf](https://files.consumerfinance.gov/f/documents/cfpb_unfair-deceptive-abusive-acts-practices-udaaps_procedures.pdf)

<sup>153</sup> Section 1031(c) of the Dodd-Frank Act (codified at 12 U.S.C. § 5531(c)) defines the scope of the CFPB’s “unfairness” power. Under § 1031(c), the CFPB “shall have no authority to declare an act or practice... to be... unfair, unless the Bureau has a reasonable basis to conclude that: (A) the act or practice causes or is likely to cause substantial injury to consumers which is not reasonably avoidable by consumers; and (B) such substantial injury is not outweighed by countervailing benefits to consumers or to competition.” 12 U.S.C. § 5531(c)(A)-(B).

requires the Commission to balance any regulatory gains from agency action against the potential business losses of creditors.<sup>154</sup>

Like any legal tests anchored in cost-benefit analysis, these statutorily mandated countervailing benefits tests are neither neutral nor value-free. Yet, by tying the hands of federal agencies through the cost-benefit inquiry, Congress opened a narrow legal forum for organized business interests to impede or push back against progressive agency actions. In the fields of payday lending<sup>155</sup> and mortgage lending,<sup>156</sup> creditors have successfully defeated several of the agencies' proposed rules to regulate "unfair" credit practices by exaggerating the market costs and diminishing the regulatory gains via manipulating the parameters of

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<sup>154</sup> See section 5 of the Federal Trade Commission Act (codified at 15 U.S.C. §45(n)).

<sup>155</sup> In 2017, the CFPB issued a payday lending rule imposing a set of underwriting requirements on short-term payday loans ("2017 Rule"). See 82 Fed. Reg. 54472 (Nov. 17, 2017). The 2017 Rule met persistent opposition by the banking industry both during its notice-and-comment stage and after promulgation. Creditors argued, among other criticisms, that the 2017 Rule had unsound empirical foundations and exaggerated the substantiality of consumer harm. In 2019, after Trump appointee Mick Mulvaney (former Republican House Representative from South Carolina and Director of the Office of Management and Budget) became the CFPB Acting Director, the CFPB announced its intent to reconsider the 2017 Rule. That reconsideration resulted in the repeal of underwriting of the 2017 Rule ("2020 Rule"). See 85 Fed. Reg. 44382 (Jul. 22, 2020). In its rationale for repealing the 2017 Rule, the 2020 Rule stated that "the 2017 Final Rule erroneously minimized the value of temporary reprieve," and "underestimated the identified practice's benefit to consumers." CFPB, *Payday, Vehicle Title, and Certain High-Cost Installment Loans*, Dkt. No. CFPB-2019-0006, at 112-13 (Jul. 7, 2020), [https://files.consumerfinance.gov/f/documents/cfpb\\_payday\\_final-rule-2020-revocation.pdf](https://files.consumerfinance.gov/f/documents/cfpb_payday_final-rule-2020-revocation.pdf). With regards to reborrowers, the 2020 Rule concludes that "there are substantial countervailing benefits from [payday lending] such as income-smoothing and avoiding a greater harm, which the 2017 Final Rule discounted." *Id.* at 112. The 2020 Rule stated that the "2017 Final Rule would constrain rapid innovation in the market." *Id.* at 121. Based on these reconsiderations, the 2020 Rule concluded that the CFPB had erroneously conducted the countervailing benefits test in the 2017 Rule and that the Rule should not have been passed in the first place. See *id.* at 98.

<sup>156</sup> Under section 1412 of the Dodd-Frank Act, which amended the TILA, a mortgage lender's compliance with the ability-to-repay (ATR) obligation may be "presume[d]" if the mortgage is a "qualified mortgage" (QM). See 15 U.S.C. § 1639c. Specially, a QM must be fully amortizing, provides a term not longer than 30 years, has upfront costs, and the lender must "verify the income and financial resources" of borrowers and consider "all applicable taxes, insurances, and assessments" in making the loan. 15 U.S.C. § 1639c(b)(2)(A)(iii)-(v). But the statute does not clarify the meaning of these words. To offer interpretive clarity and further flesh out the QM presumption, the CFPB issued a qualified mortgage rule in 2013 ("2013 QM Rule"). The 2013 QM Rule included within the QM definition a debt-to-income ratio or other measures of ATR. See 78 Fed. Reg. 6407 (Jan. 10, 2014). But the Rule met pushback by mortgage lenders on the grounds that the numerical threshold lacked empirical basis. In 2020, the CFPB undertook new rulemaking and added both a QM safe harbor and a QM rebuttable presumption based on floating Average Prime Offer Rates—that is, a specified threshold index pushed weekly reflecting the average APR offered borrowers of the best credit risk category. See 85 Fed. Reg. 86308, 86317 (Dec. 29, 2020). It repealed the 2013 QM Rule.

comparison. In judicial review of agency action, the banking industry has persuaded federal courts to overrule newly promulgated rules on the grounds that such agency actions exceeded their statutory authority by failing the cost-benefit analysis.<sup>157</sup> From the lens of neoliberal politics, thus, the elevation of cost-benefit analysis over other modes of policy inquiry created a route for organized business interests to propel de-regulatory agendas and impede consumer protection programs. It also led to the “judicialization” of policymaking—*i.e.*, the removal of important policy decisions on distributive trade-offs from domains “subject to open deliberation to arenas insulated from such deliberation through legal protocols and layers of protective rules about who may access the knowledge.”<sup>158</sup>

## 2. Conditioning Intervention Upon a Finding of Market Failure

Whereas cost-benefit analysis relates to the exercise of regulatory discretion, theories of market intervention concern the goal of consumer financial protection. Over the past five decades, neoliberalism has transformed the goal of consumer protection from directly preventing consumer harm to removing constraints on consumers’ free choice to satisfy their preferences through markets.<sup>159</sup> For neoliberals, the regulator’s job is simple: (1) to help consumers communicate their preferences in the market through the production of neutral price-signals, and (2) to ensure markets fulfill their intended functions of satisfying consumer preferences. Mess with the price-signals, there will be a chain of harmful externalities that ripple through the dynamic and complex ecosystem of market agents who respond to the signal (*e.g.*, creating arbitrage, inefficiencies, or deadweight losses).<sup>160</sup> Thus, regulators should only intervene where market failures are preventing markets to fulfil their natural mandate; and, in doing so, regulators should intervene to degree necessary to rectify these failures.<sup>161</sup> A regulator who pursue aims beyond these

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<sup>157</sup> See Complaint, *Chamber of Commerce v. CFPB*, No. 6:22-cv-00381 (Sep. 28, 2022) (claiming that the CFPB’s UDAAP manual update exceeded its authority under the Dodd-Frank Act and is arbitrary and capricious under the Administrative Procedure Act). See also Alan S. Kaplinsky, *U.S. Chamber of Commerce and Other Trade Groups File Lawsuit Against CFPB Challenging UDAAP Update to Exam Manual*, BALLARD SPAHR LLP (Sep. 29, 2022).

<sup>158</sup> GRETA KRIPPNER, CAPITALIZING ON CRISIS: THE POLITICAL ORIGIN OF THE RISE OF FINANCE 145 (2012) (describing a core feature of neoliberalism’s “depoliticization of the economy”).

<sup>159</sup> See SOEDERBERG, *supra* note 17, at 84-85. See also Robert B. Reich, *Toward a New Consumer Protection*, 128 U. PA. L. REV. 1, 20 (1979) (arguing that regulators should view the preservation of consumer free choice as the objective of consumer protection).

<sup>160</sup> See Joseph Stiglitz, *Government Failure vs. Market Failure: Principles of Regulation*, in GOVERNMENTS AND MARKETS: TOWARDS A NEW THEORY OF REGULATION 13, 23-25 (Edward J. Balleisen & David A. Moss eds., 2010).

<sup>161</sup> See Daniel Castro & Alan McQuinn, *How and When Regulators Should Intervene*, INFORMATION TECHNOLOGY & INNOVATION FOUNDATION 1, 2-9 (Feb. 2015).

two goals is not only deemed to have “abused” her discretion but doing her job “incorrectly.”

Legally, the imprints of neoliberal economics are most visible in two sets of rules dictating when a federal agency can intervene to remediate harmful practices in consumer financial markets: (1) interpretative rules confining the agencies’ rulemaking power to merely correcting market failures; and (2) judicial doctrines invalidating agency actions that “misidentified” market failures. Together, existing rules and doctrines governing the timing and substance of agency action reveal a core legal sensibility of neoliberalism: the fetishization of consumer choice.

One of the clearest examples of the neoliberal fetishization of consumer choice is the FTC’s 1980 *Policy Statement on Unfairness* (“Policy Statement”).<sup>162</sup> A response to congressional worries of FTC’s “overregulation,” the Policy Statement established a three-prong standard to limit the FTC’s exercise of rulemaking power to prohibit “unfair” market practices under section 5 of the Federal Trade Commission Act (FTCA).<sup>163</sup> Its three prongs—*i.e.*, (1) whether the practice causes consumers to incur substantial injury; (2) whether consumers can reasonably avoid such injury; and (3) whether regulating the practice creates more benefits than costs to the market—became the dominant guide for FTC’s exercise of its “unfairness” powers under FTCA.<sup>164</sup> Today, the Policy Statement serves as the template for most UDAP<sup>165</sup> legislations at the state and federal levels. The FTC’s approach to unfairness is currently embraced by a number of states with unfairness laws<sup>166</sup> and codified by Dodd-Frank Act’s provisions outlining the CFPB’s unfairness power.<sup>167</sup> In articulating the rationale for the Policy Statement, the FTC explained:

Normally, we expect the *marketplace to be self-correcting*, and we rely on *consumer choice*—the ability of individual consumers to make their own private purchasing decisions without regulatory intervention—to govern the market. We anticipate that consumers

<sup>162</sup> See FTC, POLICY STATEMENT ON UNFAIRNESS (Dec. 17, 1980), <https://www.ftc.gov/legal-library/browse/ftc-policy-statement-unfairness>

<sup>163</sup> See *id.* See also 15 U.S.C. §45(n).

<sup>164</sup> Before the FTC’s 1980 Policy Statement, the dominant factors for applying prohibition against “unfair” market practices were: (1) whether the practice injures consumers; (2) whether it violates established public policy; (3) whether it is unethical or unscrupulous. See *id.* (citing *FTC v. Sperry & Hutchinson*, 405 U.S. 233, 244-45 (1972)).

<sup>165</sup> UDAP refers to “unfair and deceptive acts or practices.” Under the Dodd-Frank Act, Congress gave the CFPB an additional power to regulate “abusive” practices, making it UDAAP.

<sup>166</sup> Several states, including Iowa, Maine, Maryland, Ohio, and Tennessee, have adopted the unfairness standard espoused by the 1980 FTC Policy Statement, using almost identical language. See David L. Belt, *The Standard for Determining “Unfair Acts or Practices” Under States Unfair Trade Practices Acts*, 80 CONN. BAR J. 247, 306-07 (2006). See also Nat’l Pol’y & Legal Analysis Network, *Consumer Protection: An Overview of State Laws and Enforcement*, PUB. HEALTH. CTR., WM MITCHELL COLL. OF L. 2, 3 (2010).

<sup>167</sup> See 12 U.S.C. § 5531(c)(A)-(B).

will survey the available alternatives, choose those that are most desirable, and avoid those that are inadequate or unsatisfactory. However, it has long been recognized that certain types of sales techniques may prevent consumers from effectively making their own decisions, and that corrective action may then become necessary. Most of the Commission’s unfairness matters are brought under these circumstances. They are brought, not to second-guess the wisdom of particular consumer decisions, but rather to halt some form of seller behavior that unreasonably creates or takes advantage of an obstacle to the *free exercise of consumer decision-making*.<sup>168</sup>

Adopted amidst the height of a neoliberal takeover of Congress and the courts, the Policy Statement reflected a deep suspicion towards regulatory paternalism and an idolization of consumer free choice.<sup>169</sup> These sentiments were also amply echoed by the prevalent legal scholarship of the time. For instance, the then-FTC Director of Policy Planning and later-U.S. Secretary of Labor, Robert Reich, wrote that a paternalistic approach to consumer protection is “fundamentally incompatible with the liberal assumption that each person is the best judge of his or her own needs.”<sup>170</sup> “A consumer-protection rationale focusing on the likelihood that consumers within particular markets will misestimate physical or economic risks attendant upon their purchases,” Reich explained, “can provide a strong basis for government intervention, untainted by paternalism.”<sup>171</sup>

In *American Financial Services Association v. FTC*, the D.C. Circuit endorsed Reich’s theory and used it to hold FTC strictly accountable to the three-prongs of unfairness outlined by the Policy Statement.<sup>172</sup> As the court emphasized, “the principle limitation placed upon [FTC’s] authority is that it cannot, consistent with the Policy Statement, intervene merely because it believes the market is not producing the ‘best deal’ for consumers.”<sup>173</sup> Thus, in reviewing agency action, the court’s “first task” is to “ensure that the [agency’s] intervention is a genuine

<sup>168</sup> See FTC, POLICY STATEMENT, *supra* note 162 (emphasis added).

<sup>169</sup> The FTC 1980 Policy Statement was adopted against the backdrop of widespread congressional calls for holding the FTC accountable. During the Carter Administration, the FTC, led by Chairman Michael Pertschuk, was widely deemed to be an “activist body.” See Kenneth N. Gilpin & Todd S. Purdum, *Resignation at F.T.C. Comes as a Surprise*, N.Y. TIMES (Mar. 14, 1985). In response to congressional threats to defund the FTC, the FTC issued this Policy Statement to restrain its own rulemaking power to prohibit “unfair” market practices under FTCA. Legal battles in Congress and in the federal courts have been fought to pushback “extraordinary activism” of the FTC. See generally William E. Kovacic, *The Modern Evolution of U.S. Competition Policy Enforcement Norms*, 71 ANTITRUST L.J. 377 (2003).

<sup>170</sup> Reich, *supra* note 159, at 14.

<sup>171</sup> *Id.* at 20.

<sup>172</sup> See *Am. Financial Serv. Ass’n v. FTC*, 767 F.2d 957, 992 (1985) (citing Robert B. Reich, *Toward a New Consumer Protection*, 128 U. PA. L. REV. 1, 14 (1979)).

<sup>173</sup> *Id.* at 982, 992 (internal quotations omitted).

response to a market failure which prevents free consumer choice from effectuating a self-correcting market.”<sup>174</sup> And, to perform this task adequately, the reviewing court should “insist that the [agency] sufficiently understand and explain the dynamics of the marketplace.”<sup>175</sup> *American Financial Services* set the prevailing judicial standard for reviewing the federal agencies’ exercise of “unfairness” power. Although the D.C. Circuit eventually upheld FTC’s credit practices rule,<sup>176</sup> *American Financial Services* significantly narrowed the scope of agency authority under their enabling statutes and compelled agencies to clearly explain their diagnosis of market failure to the reviewing courts. This allowed the courts to scrutinize agencies’ policymaking process and invalidate their actions on the grounds that they “misdiagnosed” the market failure or presented insufficient evidence.

However, in judicial review, there are no rules governing *what* constitutes a market failure or *when* the agency’s “understanding of the dynamics of the marketplace” is “genuine.”<sup>177</sup> Crucially, courts do not possess the full knowledge and expertise to determine questions of economic policy. But, by enabling courts to act as regulators and overturn agencies’ decision-making, *American Financial Services* transferred vital questions of economic trade-off in consumer protection from the agencies to the courtroom—a domain gatekept by a class of legal professionals and their allied business elites.<sup>178</sup> As such, questions of “market failure” evolved into resource contests over who can hire the most sophisticated expert witness. Oftentimes, litigation over the evidential sufficiency of “market failure” ended up becoming legal battles between the agencies and the organized business interests. The voices of consumers and their advocates are either watered-down or wholly absent.

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In sum, neoliberalism has reshaped both the goal and the substance of consumer financial protection. Whatever consumer financial protection used to be, it is now principally concerned with the protection of *free markets* and *consumer autonomy*. In this neoliberal transformation, each branch of the federal government played complementary roles: Congress laid down the legal foundations by creating an individual rights model of credit regulation; the agencies tied their own hands by adopting the cost-benefit analysis and market failure test; the courts disciplined the agencies for venturing beyond the unspoken neoliberal norm via judicial review. Collectively, this system created a neoliberal consensus whereby all problems

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<sup>174</sup> *Id.* at 993 (internal quotations omitted).

<sup>175</sup> *Id.*

<sup>176</sup> See FTC, Credit Practices Rule, 49 Fed. Reg. 7740 (1984).

<sup>177</sup> *Am. Financial Serv. Ass’n*, 767 F.2d at 992-93.

<sup>178</sup> See *id.* See also KRIPPNER, *supra* note 158, at 145.



arising from the credit markets—whether results of individual conduct or social processes—were approached as if they are outcomes of individual choice (or lack thereof). It represents the institutional equilibrium that our lawmakers, judges, and regulators have found to entrench and stabilize business interests amidst the changing credit distribution landscape from 1970s to 2000s. But, as AI-driven technological innovation started to change the landscape of credit provision once again, the inconsistencies and flaws of neoliberalism’s core commitments started to become apparent. As the next section aims to show, existing legal and technical solutions, informed by neoliberal individualism, are not only ineffective but also counterproductive because they distract us from the real problems.

## II. NEOLIBERAL FOUNDATIONS OF ALGORITHMIC EXPLOITATION

Today, new technologies are transforming the field of consumer credit. Since the mid-2010s, AI has become exponentially cheaper, accessible, sophisticated, and commercializable.<sup>179</sup> It has drawn immense attraction from creditors hoping to phase out the use of traditional credit reporting and gain a competitive edge over others. Currently, at least 82% of creditors report making consumer lending decisions using AI services.<sup>180</sup> A Fannie Mae report found that “27% of mortgage originators are currently using machine learning and artificial intelligence in their origination processes[,] whereas 58% of mortgage originators expect to adopt the technology within the two years.”<sup>181</sup> Within this decade, it is safe to say that AI credit underwriting will become the new market imperative.

The rapid adoption of AI in the credit market has spawned a range of responses. On one end of the spectrum, FinTech and banks have painted a rosy image. They argue that AI can help creditors revitalize the “credit deserts” by reaching the “unbanked” and “underbanked.”<sup>182</sup> For them, AI’s ability to amass “fringe” data and gain individual insights about consumers’ (credit-relevant) market behavior presents a valuable business opportunity: creditors will be able to lend to consumers

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<sup>179</sup> See Makada Henry-Nickie, *How Artificial Intelligence Affects Financial Consumers*, BROOKINGS INSTITUTION (Jan. 31, 2019), <https://www.brookings.edu/research/how-artificial-intelligence-affects-financial-consumers/>

<sup>180</sup> See Aite Group, *Alternative Data Across the Loan Life Cycle: How Fintech and Other Lenders Use It and Why*, prepared for Experian (2018), [https://www.experian.com/assets/consumer-information/reports/Experian\\_Aite\\_AltDataReport\\_Final\\_120418.pdf/](https://www.experian.com/assets/consumer-information/reports/Experian_Aite_AltDataReport_Final_120418.pdf/)

<sup>181</sup> See Fannie Mae, *Mortgage Lender Sentiment Survey: How Will Artificial Intelligence Shape Mortgage Lending* (Oct. 2018), <https://www.fanniemae.com/resources/file/research/mlss/pdf/mlss-artificial-intelligence-100418.pdf/>

<sup>182</sup> See, e.g., Arvind Nimbalkar, *Enterprise Finance and AI: Bridging the Financing Gap and Reaching the Credit Invisibles*, NASDAQ NEWS & INSIGHTS (Feb. 4, 2022), <https://nasdaq.com/articles/enterprise-finance-and-ai%3A-bridging-the-financing-gap-and-reaching-the0credit-invisibles/>

who are previously denied credit due to the lack of formalized credit information.<sup>183</sup> In the meantime, markets will work on their own without government regulation.<sup>184</sup> On the opposite end of the spectrum, regulators and consumer advocates have expressed concern that the unbridled use of AI can lead to the encroachment of consumer data privacy and the erosion of due process.<sup>185</sup> As creditors delegate credit decisions to AI, the credit-underwriting process can become even more opaque than it already is.<sup>186</sup> This makes consumer litigation under the fair lending laws much more difficult. Since AI is the new unchartered regulatory territory in consumer credit, these debates will carry profound consequences for the future.

The reality, however, is that all of these responses have evaded the root problem. FinTech and banks are wrong to assume that free markets will eliminate credit inequalities. Even if AI expands credit access—a big “if,” as we will see—it is unclear whether the widespread use of AI in credit markets will shrink the wealth gap (most likely not). While regulators and consumer advocates are right to worry about AI, they have misdiagnosed the problem as the erosion of consumer autonomy and free choice. Both groups have uncritically embraced neoliberalism’s normative assumptions. As this section seeks to demonstrate, the true source of algorithmic harm of AI credit-underwriting lies in its information-processing and decision-making processes. It is harmful *not* because it is more discriminatory or intrusive than credit decisions made by human loan officers. Rather, it is harmful because AI can channel creditors’ market power towards more exploitative domains of credit consumption through engineering price-signals and manufacturing consumer consent.<sup>187</sup> If AI remains de-regulated (or minimally

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<sup>183</sup> See Price Waterhouse Coopers, *Socially Responsible Banking: A Digital Path to Financial Inclusion* (last accessed on May 7, 2023), <https://www.pwc.com/us/en/industries/financial-services/library/financial-inclusion-through-artificial-intelligence.html>

<sup>184</sup> See Eren Kurshan, Hongda Shen & Jiahao Chen, *Towards Self-Regulating AI: Challenges and Opportunities of AI Model Governance in Financial Services*, ICAIF ’20: PROCEEDINGS OF THE FIRST ACM INT’L CONFERENCE ON AI IN FINANCE, CONFERENCE PAPER NO. 49 (Oct. 7, 2021).

<sup>185</sup> See, e.g., Pam Dixon & Robert Gellman, *The Scoring of America: How Secret Consumer Scores Threaten Your Privacy and Your Future*, WORLD PRIVACY FORUM (Apr. 2, 2014); CFPB, *CFPB Acts to Protect the Public from Black-Box Credit Models Using Complex Algorithms* (May 26, 2022), <https://www.consumerfinance.gov/about-us/newsroom/cfpb-acts-to-protect-the-public-from-black-box-credit-models-using-complex-algorithms/>

<sup>186</sup> See Patrice Alexnader Ficklin, Tom Pahl & Paul Watkins, *Innovation Spotlight: Providing Adverse Action Notices When Using AI/ML Models*, CFPB BLOG (Jul. 7, 2020).

<sup>187</sup> This does not imply that engineered prices and manufactured consent are phenomena specific to AI-mediated markets. Rather, my argument here is much narrower: the degree of price-manufacturing and consent-manufacture is stronger in AI-mediated markets than in pre-AI markets. In the pre-AI market society, price-engineering and consent-manufacture has been done mostly through mass culture, marketing, and other methods of manipulating consumer demand. The mechanisms that companies and states use to artificially manipulate demand to match supply are well studied by social theorists. See generally EDWARD S. HERMAN & NOAM CHOMSKY, *MANUFACTURING CONSENT: THE POLITICAL ECONOMY OF THE MASS MEDIA* (1988).

regulated)—as it will be under neoliberalism—it will lead to the following: (1) intensification of power disparities between creditors and consumers, (2) amplification of preexisting systemic inequalities, and (3) entrenchment of creditors’ power to engage in rent-seeking credit activities.

#### A. *How Is AI Changing Consumer Credit Markets for the Worse?*

##### 1. The Nature and Impact of Price/Consent Defects

Before we turn to the specifics of price-engineering and consent-manufacture, it is important to first understand their nature and impact. After all, price and consent also feature heavily in neoliberal economic thought. It would be grossly inaccurate to say that neoliberals don’t care about how prices and consent are derived. Even from a libertarian, contractarian perspective, unconscionability justifies judicial intervention of a transactional market relationship (independent of fraud).<sup>188</sup> In other words, while neoliberals place consumer autonomy and free market on a pedestal, they recognize that these ideals are not absolute and they may be imperfect. Limited exceptions from the twin ideals of neoliberalism are also found in the existing consumer credit laws.

So, what are we doing here that is different from neoliberals? The key distinction that sets us apart is our characterizations of how market agents behave and react to price/consent defects. Within the classical neoliberal imaginary, consumer preferences are exogenous to market mechanisms—the same way that markets are dis-embedded from the state.<sup>189</sup> When prices are rigged—usually because of excessive social or governmental meddling (such as central planning)—consumers will refuse to transact on the market because the underlying goods and services do not match their range of price preferences. In the language of negotiation studies, consumers will “walk towards their BATNA.”<sup>190</sup> In the same vein, neoliberals imagine consent defects to be products of consumers’ knowledge deficiency or inability to adequately communicate their (exogenous) preferences—*i.e.*, inability to exercise their best interests—given the resources they own. From the neoliberal perspective, the problems of price-engineering and consent-manufacture are results of imperfect markets and irrational market agents. Their solution, of course, is to restore perfect markets and rational agents.<sup>191</sup> These

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<sup>188</sup> See generally Anne Fleming, *The Rise and Fall of Unconscionability as the “Law of the Poor,”* 120 GEO. L.J. 1383 (2014).

<sup>189</sup> See Karel Sredl, Alexandr Soukup & Lucie Severova, *Models of Consumer’s Choice*, 16 E+M EKONOMIE A MANAGEMENT 4, 9 (2013).

<sup>190</sup> In negotiations lingo, “BATNA” is the shorthand for “Best Alternative to Negotiated Agreement.” It is the baseline option for individuals for not transacting or entering into a deal.

<sup>191</sup> The ideal of consumer rational choice was constructed by academics in the late 1970s as part of the intellectual movement to justify and spread neoliberal economics. See generally David M.

problems fall squarely within the remedial zones of disclosure and fair lending. Once these institutions are in place, consumers will be able to vindicate their rights through private litigation.

But this characterization of consumer behavior is inaccurate. Consumer preferences are not exogenous to the market; they are shaped by market power and reflective of socialized choices. What consumers choose to purchase are reflections of *what* they would like to perceive of themselves, *how* they would like to situate themselves in communities and social networks where they have standing, and what markets tell them about *how* consumption would help them achieve these social goals.<sup>192</sup> What this means is that consumer preferences are not concrete, itemized, and preexisting desires that consumers carry to the market. Instead, consumer preferences are fluid, broad, and formed within the market's allocative processes through consumers' constant shopping activities or disengagement with other market actors.<sup>193</sup> Recent advances in behavioral economics and sociology has shown that consumers are in fact *homo socialis*, rather than *homo economicus*.<sup>194</sup> Thus, price-engineering and consent-manufacture matter for different reasons: whereas neoliberals see them as reasons for further de-regulation (to expunge markets of their external influences), disclosure (to restore price-neutrality), and fair lending (to protect consumer autonomy), this article sees them as reasons for departure from the individualist solutions and greater public involvement in the private markets.

Once we understand that consumer choices are socialized and embedded, it is not hard to see why the current system—built on the discourse of individual rights and the legal infrastructure of private litigation—can never completely fulfill its promises. No matter how exploited the consumers are or how widespread the exploitative practice, consumers whose preferences are formed by price/consent defects will not file a case to begin with. From a critical perspective, the legal and technical protocols originally designed to protect consumers are in fact hurdles obstructing consumers from achieving meaningful credit equality. The following

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Grether & Charles R. Plott, *Economic Theory of Choice and the Preference Reversal Phenomenon*, 69 AM. ECON. REV. 623 (1979).

<sup>192</sup> See Michael W.M. Roos, *Willingness to Consume and Ability to Consume*, J. ECON. BEHAV. & ORG. 387, 388 (2008) (arguing that “consumer behavior is not completely determined by objective conditions such as their income (ability to buy), but also depends on subjective factors such as (attitudes and moods).”).

<sup>193</sup> See generally David A. Hensher, Camila Balhontin, William H. Greene & Joffre Swait, *Experience as a Conditioning Effect on Choice: Does it Matter Whether it is Exogenous or Endogenous?*, 48 TRANSPORTATION 2825 (2021).

<sup>194</sup> See Yochai Benkler, *Power and Productivity*, in A POLITICAL ECONOMY OF JUSTICE 35 (Danielle Allen, Yochai Benkler, Leah Downey, Rebecca Henderson & Josh Simons eds., 2022) (“*Homo economicus* is replaced by *homo socialis*, whose motivations are diverse and socialized and whose decisions are situational and reasonable, not formally rational.”).

paragraphs explore how the business applications of AI in credit underwriting are conducive to price-engineering and consent-manufacture.

## 2. Price Engineering in AI-Mediated Credit Markets

Let us begin by tackling some common misconceptions about what AI does to prices in credit markets. The first—and perhaps most popular—misconception relates to the nature of AI decision-making. According to the mainstream argument advanced by the first generation of algorithmic enthusiasts (and endorsed by FinTech and banks), AI improves the accuracy of credit risk predictions because it (1) is better at absorbing, processing, and analyzing large volumes of information than human decision-makers; and (2) acts upon such information without human biases. This translates into more accurate pricing of consumer credit risks and more optimal allocation of financial resources. The advantage of AI, the argument goes, is that it substitutes for biased human judgement.<sup>195</sup> It concludes that AI’s “suppression of some aspect of the self, the countering of subjectivity” leads to more desirable market outcomes.<sup>196</sup>

But the mainstream argument suffers from a critical flaw: its description of AI decision-making is reductive and inaccurate. Unlike what enthusiasts depict, algorithms are neither neutral interlocutors of market information nor unbiased executors of their users’ instructions. In fact, AI makes decisions by replicating, rather than displacing, human bias. Recall that AI decisions are made through (1) scraping available individual/market-level information about their subjects, (2) repackaging scattered data into behavioral archetypes, (3) generating predictions about human behavior based on these constructed archetypes, and (4) adjusting predictions to reflect new informational intake.<sup>197</sup> This process inevitably recycles past human prejudice and erroneous judgements into AI’s present and future predictions.<sup>198</sup> For instance, data about consumers’ education level, incarceration history, and court records—*i.e.*, outcomes of past societal disparities resulting from racial-class subjugation—are typically picked up by AI in the scraping process and repackaged into behavioral archetypes about the consumer’s behavior.<sup>199</sup> Even “pure economic data”—such as consumer income, household indebtedness, and credit history—may reflect racial-class disparities, since minorities tend to have

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<sup>195</sup> See, e.g., Pretrial Justice Institute, *Pretrial Risk Assessment Can Produce Race-Neutral Results*, NAT’L CTR. FOR STATE CTS. (2017); Justin Jouvenal, *Police Are Using Software to Predict Crime. Is it a “Holy Grail” or Biased Against Minorities?* THE WASHINGTON POST (2016); THEODORE M. PORTER, *TRUST IN NUMBERS: THE PURSUIT OF OBJECTIVITY IN SCIENCE AND PUBLIC LIFE* (1995).

<sup>196</sup> See generally LORRAINE DASTON & PETER GALISON, *OBJECTIVITY* (2007).

<sup>197</sup> See *supra* Introduction, Section B subsection (ii).

<sup>198</sup> See generally RUHA BENJAMIN, *RACE AFTER TECHNOLOGY: ABOLITIONIST TOOLS FOR THE NEW JIM CODE* (2019).

<sup>199</sup> See *id.*

thinner wealth cushions and are more frequently targeted by predatory creditors (especially in vehicle title loans and payday lending) due to their economic desperation.<sup>200</sup> When these specific individual-level data are absent, AI fills in the blank using behavioral archetypes of other consumers from the same constructed group.<sup>201</sup> Thus, credit pricing by AI is anything but neutral and value-free.

The second common misconception relates to the cheapness of credit underwritten by AI. Advocates for de-regulating AI argue that the increasing market adoption of AI has only improved credit access and made the underwriting process more equitable.<sup>202</sup> They even find empirical support from the public data. As the National Bureau of Economic Research (NBER) indicates, “FinTech algorithms discriminate 40% less than face-to-face lenders” when it comes to mortgage loan approval.<sup>203</sup> Another study, conducted by the CFPB, indicates that creditors using AI approve 23-29% more loan applicants than creditors who purely rely on human judgement for their credit decisions.<sup>204</sup> The same study also shows that AI lending lowers the annual average interest rates by 15-17% for approved loans.<sup>205</sup>

However, if we pay attention to other metrics, it becomes unclear whether the existing uses of AI in lending are meaningfully improving equal credit access for consumers. Using administrative data of 10 million U.S. mortgages originated

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<sup>200</sup> See, e.g., Oren Bar-Gill & Elizabeth Warren, *Making Credit Safer*, 157 U. PA. L. REV. 1 (2008); Cassandra Jones Havard, *On the Take: The Black Box of Credit Scoring and Mortgage Discrimination*, 20 B.U. PUB. INT. L. J. 241 (2011); Talia B. Gillis, *The Input Fallacy*, MINN. L. REV. (forthcoming 2022), at \*20.

<sup>201</sup> See Amalia Miller & Catherine Tucker, *Historic Patterns of Racial Oppression and Algorithms*, MASS. INST. TECH. (2018) (finding that algorithms tend to overpredict the presence of African American in states where there is a historical record of discrimination against African Americans). See also Laura Abrardi, Carlo Cambini & Laura Rondi, *Artificial Intelligence, Firms, and Consumer Behavior: A Survey*, 36 J. ECON. SURV. 969, 978 (2022).

<sup>202</sup> See, e.g., U.S. Chamber of Commerce, *How Businesses Are Using AI and Data to Enable Financial Inclusion* (Apr. 20, 2022), <https://www.uschamber.com/on-demand/technology/how-businesses-are-using-ai-and-data-to-enable-financial-inclusion>; Derek Hosford, *AI Can Provide a Solution to the Problem of Credit Invisibility*, THE AMERICAN CONSUMER INSTITUTE CENTER FOR CITIZEN RESEARCH (Jun. 10, 2021), <https://theamericanconsumer.org/2021/06/ai-can-provide-a-solution-to-the-problem-of-credit-invisibility/>

<sup>203</sup> For mortgage loans originated on fintech platforms using algorithmic solutions, Latinx and African American loan applicants on average pay 5.3 basis points more in interest for purchases and 2.0 basis points for refinancing. In comparison, Latinx and African Americans pay 7.9 and 3.6 basis points more in interest for home purchase and refinance mortgages respectively because of human bias. See Robert Bartlett, Adair Morse, Richard Stanton & Nancy Wallace, *Consumer-Lending Discrimination in the FinTech Era*, NATIONAL BUREAU OF ECONOMIC RESEARCH (Jun. 2019), [https://www.nber.org/system/files/working\\_papers/w25943/w25943.pdf](https://www.nber.org/system/files/working_papers/w25943/w25943.pdf)

<sup>204</sup> Patrice Fickin & Paul Watkins, *An Update on Credit access and the Bureau’s First No-Action Letter*, CONS. FIN. PROT. BUR. (Aug. 6, 2019).

<sup>205</sup> See *id.*

between 2009 and 2016, Fuster et al. found that, while AI has indeed increased aggregate credit access and average loan acceptance rates, it widened cross-group disparity.<sup>206</sup> These disparities are most pronounced in loan pricing and interest rates.<sup>207</sup> “A large fraction of borrowers who belong to the majority group [...] experience lower estimated default propensities under the machine learning technology” but “these benefits do not accrue to some minority race and ethnic groups [...] to the same degree.”<sup>208</sup> Even within racial minority groups, disparities in lending are discovered. Those who benefit from AI are disproportionately White Hispanic and Asian. Those who lose tend to be Black and non-White Hispanic.<sup>209</sup>

Thus, focusing on loan acceptance/denial rates as the measurement for credit access obscures more than it illuminates. While AI does approve more loans than human loan officers, the data does not tell us about the *quality* and *substance* of the loans being approved. A more plausible explanation for the positive correlation between AI adoption and credit access is that AI helps creditors identify previously invisible profit-making opportunities. Since AI allows creditors to assess credit risks of consumers without the use of formalized credit information, it also enables them to reach the “unbanked” and “underbanked” communities.<sup>210</sup> But, to compensate for the high risks of lending these “credit deserts,” creditors will need to adjust the prices to match the risks if they hope to make a profit.<sup>211</sup> To do this, creditors typically reduce the upfront prices of lending (to make them more accessible by the low-income) but increase the prices on the backend—through deferred interest payments, buy-now-pay-later schemes, balloon payments, or negatively-amortizing interests. With the use of more sophisticated AI credit models, such as continuously-learning DL algorithms, creditors can more easily reap profits from the low-income and extract rents by *obscuring the actual costs* of these consumer financial products. Increasing credit access in this way will only widen the wealth gap and systemic credit inequalities. What the mainstream proposition omits, therefore, is the flipside of credit cheapness: low quality.

The third common misconception relates to a claim about the knowledge discovery process of AI: the belief that more data leads to more accurate predictions. This claim builds on the techno-chauvinist assumption that greater informational intake necessarily produces more rational decisions; it concludes that complex

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<sup>206</sup> See Andreas Fuster, Paul Goldsmith-Pinkham, Tarun Ramadorai & Ansgar Walther, *Predictably Unequal? The Effects of Machine Learning on Credit Markets*, 77 JOURNAL OF FINANCE 5, 14-15 (2022) (using data collected under the Home Mortgage Disclosure Act).

<sup>207</sup> See Katja Langenbacher, *Consumer Credit in the Age of AI—Beyond Anti-Discrimination Law*, LAWFIN WORKING PAPER NO. 42, EUROPEAN CORP. GOV. INST. 1, 10 (Feb. 2023).

<sup>208</sup> Fuster et al., *supra* note 206, at 8.

<sup>209</sup> See *id.* at 31-32.

<sup>210</sup> See Nimbalker, *supra* note 182.

<sup>211</sup> See *id.*

information scraping and processing engines are superior to simpler ones.<sup>212</sup> The practical implication of this claim is that feeding algorithms more data necessarily improves their predictive performance. If an AI ever makes an “irrational” decision, such as discriminating against minority consumers in the credit underwriting process, then the problem must be “inadequate or insufficient data inputs.”<sup>213</sup>

But the reality is that more data can actually reinforce algorithmic biases. Even though AI’s information-retaining capacity and computing power are infinitely superior to humans, AI makes decisions by replicating the human decision-making structure. Contrary to the public imagination, AI doesn’t actually make use of every piece of data gathered.<sup>214</sup> When AI receives new data in raw, scattered form, the first task it does is categorizing them into existing archetypes.<sup>215</sup> Since AI is trained using data from the observable human environment, archetypes constructed by AI inevitably reflects the same bias that exist in the human environment.<sup>216</sup> Thus, the decision-making models built by AI tend to emulate pre-existing “staple” decisions—*i.e.*, norms that can be summarized into statistical patterns.<sup>217</sup> These “staple” decisions then form the basis of AI’s “self-learning” process—*i.e.*, how it tunes its parameters to reflect new information, what weight it gives to each factor, and which data it determines to be “distractive” or “noisy.”<sup>218</sup> By design, therefore, AI marginalizes any “splinter data” that cannot be mapped onto a pre-existing norm.<sup>219</sup> This means that AI, like humans, can exhibit confirmation biases when fed too much information. While counterintuitive, this certainly makes sense given that recent innovations in AI—especially those in natural language processing such as ChatGPT—have all aimed to make AI “think more like humans.”

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<sup>212</sup> For further critiques of “Techno-Chauvinism,” or as they are more commonly called, “Techno-Solutionism,” see generally MEREDITH BROUSSARD, *ARTIFICIAL UNINTELLIGENCE: HOW COMPUTERS MISUNDERSTAND THE WORLD* (2018); EVGENY MOROZOV, *TO SAVE EVERYTHING: CLICK HERE: THE FOLLY OF TECHNOLOGICAL SOLUTIONISM* (2014).

<sup>213</sup> See Sara Hooker, *Moving Beyond “Algorithmic Bias is a Data Problem”*, 2 *PATTERNS* 4 (2021).

<sup>214</sup> See H. James Wilson, Paul R. Daugherty & Chase Davenport, *The Future of AI Will be About Less Data, Not More*, *HARVARD BUSINESS REVIEW* (Jan. 14, 2019), <https://hbr.org/2019/01/the-future-of-ai-will-be-about-less-data-not-more>

<sup>215</sup> See Sidath Asiri, *An Introduction to Classification in Machine Learning*, *BUILT-IN* (Nov. 15, 2022), <https://builtin.com/machine-learning/classification-machine-learning>

<sup>216</sup> See Reva Schwartz, Apostol Vassilev, Kristen Greene, Lori Perine, Andrew Burt & Patrick Hall, *Towards a Standard for Identifying and Managing Bias in Artificial Intelligence*, *NIST SPECIAL PUB. 1270* (2022), <https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.1270.pdf>

<sup>217</sup> See also Artem Oppermann, *Predictive Behavior Modeling: How to Keep Your Customers With AI*, *BUILT-IN* (Jun. 14, 2022), <https://builtin.com/machine-learning/predictive-behavior-modeling>

<sup>218</sup> See Shivani Gupta & Atul Gupta, *Dealing with Noise Problem in Machine Learning Data-sets: A Systematic Review*, 161 *PROCEDIA COMP. SCI.* 466, 474 (2019).

<sup>219</sup> See Jamie Wareham, *Why Artificial Intelligence is Set Up to Fail LGBTQ People*, *FORBES* (Mar. 21, 2021), <https://www.forbes.com/sites/jamiewareham/2021/03/21/why-artificial-intelligence-will-always-fail-lgbtq-people/?sh=4c6e3946301e>



Nevertheless, the fallacy of “more-data-means-better-outcomes” runs deep in the credit industry. The idolization of informational quantity has largely fueled the movement within the banking to expand the use of alternative “fringe” data. This wave began with FinTech’s push for “big data” analytics in the personal loan and small-business credit underwriting space. In 2012, a Los Angeles-headquartered start-up, ZestFinance (now “Zest AI”), became the first-mover in the credit industry to use AI to generate consumer behavioral insights from the mass scraping and processing of alternative “fringe” data.<sup>220</sup> ZestFinance’s business model consists of combining data aggregation, credit assessment, and small-dollar (payday) lending all in one place.<sup>221</sup> ZestFinance’s marketing strategy emphasized AI as a solution to the persistent problem of “credit invisibility” in low-income communities.<sup>222</sup> It framed its approach as using “all data as credit data.”<sup>223</sup> By 2022, alternative data usage has become widespread.<sup>224</sup> Today, almost all FinTech in the credit industry has embraced the “all-data-is-credit-data” approach one way or another.<sup>225</sup>

Piercing through the rosy image painted by ZestFinance, the reality of alternative data in credit is far more sinister. ZestFinance’s AI model takes into consideration data that may appear to have little connection with creditworthiness.<sup>226</sup> The AI model measures “how responsible a loan applicant is”

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<sup>220</sup> ZestFinance originally partnered with the Turtle Mountain Band of Chippewa Indian Tribe to create the subsidiary BlueChip, which is incorporated under tribal law. Because of its tribal lender status, BlueChip (under the control and direction of ZestFinance) was able to evade state usury laws capping interest rates. In 2018, ZestFinance became a target for class action, in which the plaintiffs alleged that the loans originated by ZestFinance’s violated Washington usury law (Wash. Rev. Code § 19.52.030, *et seq.*), the Washington Consumer Protection Act (Wash. Rev. Code § 19.86.020, *et seq.*), and constituted unjust enrichment under Washington common law. *See Titus v. ZestFinance, Inc.*, No. 18-5373, 2018 WL 5084844, at \*1 (W.D. Wash. 2018). The case was settled in 2020. Afterwards, ZestFinance rebranded into Zest AI and changed its business from providing payday loans to providing AI-based credit analytical services to other banks and creditors.

<sup>221</sup> *See id.*

<sup>222</sup> For example, the LinkedIn page of ZestFinance states: “The world’s most innovative lenders rely on ZestFinance to do more profitable lending through machine learning. Our Zest Automated Machine Learning (ZAML) software is the only solution for explainable AI in credit, and we automate risk management so our customers can focus on lending safely to more people” (accessed Aug. 21, 2022), <https://www.linkedin.com/company/zestfinance/>; *See also* Steve Lohr, *Big Data Underwriting for Payday Loans*, N.Y. TIMES (Jan. 19, 2015), <https://archive.nytimes.com/bits.blogs.nytimes.com/2015/01/19/big-data-underwriting-for-payday-loans/>

<sup>223</sup> *See* Quentin Hardy, *Just the Facts. Yes, All of Them*, N.Y. TIMES (Mar. 24, 2012). *See also* Emily Rosamond, “All Data is Credit Data”: *Reputation, Regulation and Character in the Entrepreneurial Imaginary*, PARAGRANA (Dec. 30, 2016).

<sup>224</sup> *See* EXPERIAN, USING ALTERNATIVE CREDIT DATA FOR CREDIT UNDERWRITING (Sep. 8, 2022).

<sup>225</sup> *See generally* EXPERIAN, 2022 STATE OF ALTERNATIVE CREDIT DATA REPORT (Jul. 12, 2022).

<sup>226</sup> After becoming a target of a class action lawsuit, ZestFinance re-oriented its business to focus on developing explainable AI solutions to increase transparency in credit underwriting. *See* ZestFinance, *ZestFinance To Deliver First Fully Explainable Artificial Intelligence Solution For*

by analyzing the speed she scrolls through an online terms-and-conditions disclosure.<sup>227</sup> The number of social media connections a person has, the frequency that she deactivates an account, and the number of connections she unfriends are used as proxies to measure risk-taking tendencies.<sup>228</sup> The model also considers spending habits in the context of the loan applicant’s geographic location.<sup>229</sup> For example, “paying half of one’s income [on rent] in an expensive city like San Francisco might be a sign of conventional spending, while paying the same amount in cheaper Fresno could indicate profligacy.”<sup>230</sup> The most alarming part is that these proxies were not inserted by their human programmers—they were generated automatically via algorithmic knowledge discovery processes that merely seek to model and replicate the human condition.<sup>231</sup> Proxy discrimination runs deep in each step of AI’s analysis.<sup>232</sup>

In a nutshell, all three common misconceptions stem from a misunderstanding of how AI works in credit markets. These misconceptions are rooted in the belief that AI is fundamentally different from human intelligence and exogenous to the human environment. Yet, as the foregoing paragraphs demonstrate, these assertions cannot be further from the truth. In making predictions about human behavior and acting upon them, AI embeds, repackages, and reifies the very inequalities that are found in the human world. But AI also goes one step further: AI amplifies these biases by building on each other’s biases.<sup>233</sup> Once an AI model computes a result and wraps it in the form of packaged data, such data then enter the stream of market

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*Credit Underwriting with Microsoft Cloud*, CISION PR NEWSWIRE (Dec. 19, 2018), <https://www.prnewswire.com/news-releases/zestfinance-to-deliver-first-fully-explainable-artificial-intelligence-solution-for-credit-underwriting-with-microsoft-cloud-300768706.html>.

Currently, Zest is no longer engaged in payday lending. *See Zest, Zest Settles All Claims, Cut Ties With Payday Lending* (Sep. 11, 2020), <https://www.zest.ai/insights/zest-settles-all-claims-cuts-ties-with-payday-lending>

<sup>227</sup> Quentin Hardy, *Big Data for the Poor*, N.Y. TIMES (Jul. 5, 2012), <https://archive.nytimes.com/bits.blogs.nytimes.com/2012/07/05/big-data-for-the-poor/>

<sup>228</sup> *Id.*

<sup>229</sup> *Id.*

<sup>230</sup> *Id.*

<sup>231</sup> *See, e.g.,* Michael Carl Tschantz, *What Is Proxy Discrimination?*, ASS’N OF COMPUTING MACHINERY DIGITAL LIBRARY (Jun. 2022), <https://dl.acm.org/doi/fullHtml/10.1145/3531146.3533242>; Aaron Klein, *Reducing Bias in AI-Based Financial Services*, BROOKINGS INST. (Jul. 10, 2020), <https://www.brookings.edu/research/reducing-bias-in-ai-based-financial-services/>

<sup>232</sup> *See generally* Anya E.R. Prince & Daniel Schwarcz, *Proxy Discrimination in the Age of Artificial Intelligence and Big Data*, 105 IOWA L. REV. 1257 (2020).

<sup>233</sup> *See* Laura Douglas, *AI Is Not Just Learning Our Biases; It Is Amplifying Them*, MEDIUM (Dec. 5, 2017), <https://medium.com/@laurahelendouglas/ai-is-not-just-learning-our-biases-it-is-amplifying-them-4d0dee75931d>

data that is constantly being scrapped and analyzed by other AI models.<sup>234</sup> In this digital ecosystem where data is incessantly rinsed and remade, price-signals reflect the aggregate biases of the market rather than the inherent value of goods and services being transacted.

Practically, the fact that AI possesses similar decision-making properties as humans but exhibit far superior information-processing capacity has profound implications for the market—especially when AI has the capacity to internalize and replicate entire industry patterns. If the credit industry is generally biased against minorities, then the AI will certainly exhibit the same bias. From an outcome-oriented perspective, the key difference between human and AI lenders is that, while the former may “inefficiently” deny loans due to racial animus or invidious discrimination, the latter “efficiently” exploits the same status-subordinated groups by pinpointing extractive profit-making lending opportunities.

### 3. Consent Manufacture as Information Control

Consent manufacture is not new. It is part and parcel of the market’s disciplinary power to manipulate consumers into buying what they don’t need. It is also integral to the state’s propaganda power to mobilize citizens into acting against their self-interests and serving the elite consensus.<sup>235</sup> Its origins and manifestations are well documented in Edward Herman and Noam Chomsky’s seminal work, *Manufacturing Consent*.<sup>236</sup> Since its coinage, the term consent manufacture has been amply applied to studies of social media, the internet of things, and other engineered information environments.<sup>237</sup>

While the focal point of Herman and Chomsky’s study is mass media, parallel dynamics can be found in AI. Like mass communications technologies, AI ushered an era of unprecedented suppression of the *self* via creating a chronic “reliance on market forces, internalized assumptions, and self-censorship[,] without overt coercion.”<sup>238</sup> This interweaving web of suppressive forces is reinforced by both the culture of neoliberal individualism (creating self-alienation through the breakdown of communities) and the material conditions of market dependency (compelling

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<sup>234</sup> See Julie E. Cohen, *The Biopolitical Public Domain: the Legal Construction of the Surveillance Economy*, 31 PHILOS. TECHNOL. 213, 214-15, 222 (2018) (describing personal data as both raw and readily available for commercialization).

<sup>235</sup> See generally HERMAN & CHOMSKY, *supra* note 187.

<sup>236</sup> See *id.*

<sup>237</sup> See, e.g., Jonathan A. Obar & Anne Oeldorf-Hirsch, *The Clickwrap: A Political Economic Mechanism for Manufacturing Consent on Social Media*, 4 SOCIAL MEDIA + SOCIETY 3 (2018); Amy ter Haar, *Manufacturing Consumer Consent: The Future of Social Commerce*, IVEY BUS. J. (ONLINE) (Jun. 2014), <https://iveybusinessjournal.com/publication/manufacturing-consumer-consent-the-future-of-social-commerce/>

<sup>238</sup> HERMAN & CHOMSKY, *supra* note 187, at 306.

people to resort to exploitative markets to satisfy their basic needs of survival and subsistence). It exists in all informational systems operating under the capitalist logic, whether undergirded by *old* or *new* technologies.<sup>239</sup> Here, what distinguishes AI's suppression from that of mass communications is the form of control and the impact it has on the lives of those subject to the suppression.

In the credit market, AI manufactures consumer consent through two distinctive yet mutually-reinforcing pathways: (1) creation of personalized informational silos designed to control and reset expectations of consumers within the immediate zone of the credit transaction; and (2) production of generalized knowledge about group consumption behaviors designed to manipulate prospective consumers and those who are nonparties to the credit transaction.<sup>240</sup> Whereas the first concerns the control over vertical data flows between consumers and creditors, the second concerns the control of horizontal data flows between consumer peers by creditors.<sup>241</sup>

In the first pathway, AI harvests consumer data to learn about the consumers' behavioral proclivities while simultaneously reshaping consumer expectations by pressing their cognitive weak spots. This creates a system of *self-hallucination*, whereby the consumer trapped within the AI-generated informational silo is ceaselessly inundated with information nudging her to choose credit products that are more exploitative and profitable for the creditor. The classic example is data aggregation in payday lending. Payday loans notoriously attract low-income, low-savings, and socially desperate consumers because they do not require credit scores or other formal credit history from the loan applicant.<sup>242</sup> Such loans tend to have high backend costs (albeit with low entry prices) that can trap borrowers into persistent indebtedness.<sup>243</sup> With the use of AI, payday lenders can more accurately seek out situationally precarious consumers and those who have tendencies to reborrow at high costs with very little information about any individual

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<sup>239</sup> Cf. MICHAEL BURAWOY, *MANUFACTURING CONSENT: CHANGES IN THE LABOR PROCESS UNDER MONOPOLY CAPITALISM* (1982) (focusing on consent manufacture in industrial labor relations and how emerging technological, political, and ideological systems changed factory life).

<sup>240</sup> See generally Salomé Viljoen, *Data Relations*, 13 LOGIC(S): DISTRIBUTION 1 (May 17, 2021), <https://logicmag.io/distribution/data-relations/>

<sup>241</sup> For further discussion about the concept of vertical versus horizontal data relations, see Viljoen, *supra* note 37, at 607-08, 610-13.

<sup>242</sup> See CFPB, *Payday Loans, Auto Title Loans, and High-Cost Installment Loans: Highlights from CFPB Research*, CONS. FIN. PROT. BUR. (Jun. 2, 2016), [https://files.consumerfinance.gov/f/documents/Payday\\_Loans\\_Highlights\\_From\\_CFPB\\_Research.pdf](https://files.consumerfinance.gov/f/documents/Payday_Loans_Highlights_From_CFPB_Research.pdf)

<sup>243</sup> See *id.* On average, payday lenders charge \$15-30 interest for every \$100 borrowed. For two-week loans, these finance charges can result in interest rates from 390-780% APR. Shorter term loans have even higher APRs. Once a borrower misses one payment, it is very typical for such payments to compound and result in revolving debt. See Consumer Federation of America, *How Payday Loans Work*, PAYDAY LOAN INFORMATION FOR CONSUMERS (accessed Apr. 19, 2023).

consumer.<sup>244</sup> In the process of learning about the consumer's needs, inclinations, and predispositions, the AI mixes and matches price terms in ways that consumers will most likely accept. AI can also design the optimal payday loan structure that attract consumers who does not need or would not have otherwise applied for the loan.<sup>245</sup> Here, the role of AI is to augment the power of creditors over consumers—via giving creditors the control over vertical flows of data between the creditor and the consumer.

In the second pathway, AI aggregates data from a particular consumer group and uses it to shape expectations of prospective consumers who are not yet in the credit transaction. This creates an ecosystem of *peer-hallucination* that undercuts consumer power on two parallel dimensions. First, as between consumers, AI creates a horizontal system of norm-convergence whereby consumers in the same group affiliations and their proximate social networks are exposed to the same expectations. For instance, when consumer  $A_0$  applies for a loan underwritten by AI, those within the same group—consumers  $A_1$  and  $A_2$ —will be exposed to similar expectations as  $A_0$  when they apply for a loan.<sup>246</sup> If  $A_0$ 's consumer expectations are skewed by processes of self-hallucination,  $A_1$  and  $A_2$  will most likely experience the same. This is because the nature of AI—and especially for DL algorithms—is that it “can be used to know things about  $[A_1]$  that  $[A_1]$  does not know [about herself], by referring back to  $[A_1]$  from  $[A_0]$ .”<sup>247</sup> And, to the extent that certain aspects of group  $A_n$  intersect with group  $B_n$ , “data from  $A_n$  can be used to train models that ‘know’ things about  $B_n$ , a population that may not be in any vertical relation with the system's owner.”<sup>248</sup> Second, as between creditors, AI generates data flows between users of AI engaged in the same underwriting practice. It creates two-tiered digital environment: On the one hand, creditors can share information they garnered about the consumers in a networked environment constructed by AI. On the other hand, consumers who are subjects of data scraping are isolated and kept mostly in the dark about what information they generate. Again, harking back to the example of payday lending, the “data of those who have applied for a loan can be shared among lenders for retargeting.”<sup>249</sup> Horizontal behavioral insights

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<sup>244</sup> See Penny Crosman, *How Fintechs are Using AI to Transform Payday Lending*, AMERICAN BANKER (Mar. 7, 2017), <https://www.americanbanker.com/news/how-fintechs-are-using-ai-to-transform-payday-lending>

<sup>245</sup> See *id.*

<sup>246</sup> Here, I refer to “groups” as behavioral archetypes that are summarized and categorized by AI in the knowledge discovery process. They may or may not correspond with group classifications that exist in the observable natural world, such as race, sex, gender, or religion.

<sup>247</sup> Viljoen, *supra* note 37, at 611.

<sup>248</sup> *Id.*

<sup>249</sup> Emmanuel Mogaji, *Addressing the Implications of AI for Individuals Seeking Payday Loans*, AI BUSINESS (May 23, 2019), <https://aibusiness.com/verticals/addressing-the-implications-of-ai-for-individuals-seeking-payday-loans>

about the consumer can be used by payday lenders to target entire communities and trap reborrowers into unending cycles of indebtedness. Here, the role of AI is to sever direct horizontal ties between consumers while granting creditors visibility and control over the horizontal flow of consumer data.

Through the interplay of self/peer-hallucinating forms of consent manufacture, AI creates a digital environment where consumers are turned into data-producing machines—churning out new data each time they participate in the digital economy. Within this constructed environment, consumers are incessantly generating new marketable data through their routine engagement with the credit system. Data extracted from reading consumers’ everyday life are split apart, atomized, and reassembled into market price-signals; the price-signals are then re-consumed by consumers and turned into new data—a cycle of digital cannibalization.<sup>250</sup> Such data are not only used against themselves, but also used against every other individual who belong to groups categorized by AI.<sup>251</sup>

In essence, the horizontal and vertical pathways of consent manufacture are central components of creditors’ control of information flows between themselves and consumers—and, by extension, the material underpinnings of creditor power over consumers. By imprisoning consumers within self-hallucinating information silos and exporting knowledge extracted from their digital imprisonment to those who are not directly within the vertical relations of the AI’s owner, AI essentially turns consumers into data-production machines. This process is done through the constant splitting, atomizing, and repackaging of consumers’ lives and activities into raw data materials that are readily available for further economic appropriation. In this system, consumers become part of the products that they ultimately consume. Like in the age of mass media, this multidimensional process of consent manufacture in AI-mediated credit markets has ushered an era of unprecedented suppression of the *self*. But, unlike in the age of mass media where the *self* was largely intact (albeit suppressed), here, in digital environments engineered by AI, the *self* is amputated, pulverized, and remade into commodities within the capitalist logic of (re)production.

## B. *Where is the Locus of Algorithmic Harm?*

### 1. Commodification as Algorithmic Informational Harm

As the foregoing sections have illustrated, AI undercuts consumer power and exploits them via creating an enclosed digital ecosystem where information about consumers’ lives, activities, and social networks are ceaselessly mined, rinsed, and

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<sup>250</sup> See COHEN, *supra* note 29, at 71-72.

<sup>251</sup> See *id.* at 72.

repackaged into marketable data.<sup>252</sup> This process—the pulverization and commodification of consumer *selfhood*—is the quintessential pathology of neoliberal informational capitalism.<sup>253</sup>

In contemporary socio-cultural critique, the harm of commodification is generally manifested in the form of self-alienation and de-humanization.<sup>254</sup> The vast majority of social and cultural critics emphasize how the immaterial effects of commodification in the information age hamper people’s capacity to imagine and aspire towards a life of balance, dignity, citizenship, and ultimately—emancipation.<sup>255</sup> Those that pay attention to commodification’s material impact on people’s wealth and health tend to describe the harms of commodification in abstract ways.<sup>256</sup> Much of the energy, passion, and outrage generated by commodification in the digital economy has been channeled towards organizing and mobilizing for informational justice.<sup>257</sup> The present momentums for activism and disengagement are, in part, motivated by a deep suspicion of the state’s ability to redeem itself in the face of corporate capture and a fundamental repudiation of the market status quo.

But, for us lawyers, the key question remains how to redress the harms of commodification within legal-institutional domains. After all, any meaningful change through legal or policy advocacy entails the inevitable engagement with existing institutional forums. Thus, from a legal perspective, the commodification of *self* in AI-mediated digital economies propels us to ask a different set of questions: First, in what ways has the commodification of consumer data created, reinforced, or perpetuated structures of systemic inequality that undermine people’s access to credit as means to pursue a meaningfully dignified work-life? Second, how does commodification result in concrete injuries on the individual and social

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<sup>252</sup> See *id.* at 71-72.

<sup>253</sup> See, e.g., Dave Ellenwood, “*Information Has Value*”: *The Political Economy of Information Capitalism*, IN THE LIBRARY WITH THE LEAD PIPE (Aug. 19, 2020), <https://www.inthelibrarywiththeleadpipe.org/2020/information-has-value-the-political-economy-of-information-capitalism/>; Jernej A. Prodnik, *A Seeping Commodification: The Long Revolution in the Proliferation of Communication Commodities*, 12 TRIPLEC: COMMUNICATION, CAPITALISM & CRITIQUE 142, 143 (2014); David Singh Grewal & Jedediah Purdy, *Introduction: Law and Neoliberalism*, 77 L. & CONTEMP. PROBL. 1, 13-16 (2014).

<sup>254</sup> See, e.g., Leandro Gaitán, *The Commodification of Personality: Human Enhancement and Market Society*, 31 HUMAN AFFAIRS 40, 45 (2021); Luigi Esposito & Fernando M. Perez, *Neoliberalism and the Commodification of Mental Health*, 38 HUMANITY & SOCIETY 414 (2014).

<sup>255</sup> See generally MIKE HEALY, *MARX AND DIGITAL MACHINES: ALIENATION, TECHNOLOGY, CAPITALISM* (2020).

<sup>256</sup> See, e.g., Derek Hall, ‘*Commodification of Everything*’ Arguments in the Social Sciences: Variants, Specification, Evaluation, Critique, ENVIRON. & PLANNING A: ECON. & SPACE (ONLINE) (Oct. 19, 2022); Peter Halewood, *On Commodification and Self-Ownership*, 20 YALE J. L. & HUMANITIES 131, 152 (2008).

<sup>257</sup> See Ellenwood, *supra* note 253.

levels. And, to the extent that these consumer injuries are cognizable and describable under existing law, what potential areas are ripe for legal intervention?

This section seeks to answer the above questions by identifying the exact locus of harm in AI information processing systems. In doing so, this section looks at how the existing *dignitarian* concepts of data governance—anchored the legal efforts to protect individual autonomy against the invasiveness of self-commodification—only address half of the problem. The other half, as the following paragraphs will show, lies in the unjust relations of data production and circulation under which informational harms are produced. Thus, the relational aspect of informational injustice invites us to expand the concept of commodification—not only as the suppression of *self*, but also as the subjugation and discipline of *others*.

(i) *Sources of Informational Harm*: In enclosed digital environments, consumers typically suffer two types of informational harm—(1) *individual* informational harm, which refers to “harm[s] that a data subject may incur from how information about [individuals] is collected, processed, or used,”<sup>258</sup> and (2) *social* informational harm, which refers to the “harms that third-party individuals may incur when information about a data subject is collected, processed, or used.”<sup>259</sup>

While both harms can be caused by AI information-processing systems, the two differ in terms of the *directionality* of informational control from which such harms are generated. *Individual* harm is caused by situating consumers within highly monitored and engineered informational systems where owners/users of AI (creditors) exert vertical control over the circulation of data and the social relations of data production.<sup>260</sup> *Social* harm is produced by exporting individual harm to consumers outside the vertical control of informational flows by owners/users of AI, through “amplify[ing] social processes of oppression along horizontal data relations.”<sup>261</sup> As explored earlier in this article, both vertical and horizontal pathways of informational control are integral to the process of commodification.<sup>262</sup> Essentially, what we identify here as *individual* and *social* informational harm are actually the respective outcomes of vertical and horizontal informational control.

(ii) *Legal Descriptions of Informational Harm*: Conceptualizing informational harm as both individually and socially constituted helps us see the full picture of informational injustice in operation. It also helps us situate the valuable socio-cultural insights about neoliberal commodification within a legally solvable space. Here, it is crucial to understand that the nature of informational harm is *relational*.

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<sup>258</sup> Viljoen, *supra* note 37, at 586.

<sup>259</sup> *Id.*

<sup>260</sup> *See id.* at 595-97.

<sup>261</sup> *Id.* at 641.

<sup>262</sup> *See supra* Part II.A.3.



What this means is that informational harms are outcomes of unjust arrangements of *data relations*—*i.e.*, relations of control and management over the production and flow of data between the AI system’s owners and their subjects. It is not, as the neoliberal legal paradigm assumes, a natural consequence of wrongful conduct by individuals being irresponsible or harboring animus (against consumers).

While the neoliberal framework of individual responsibility does capture some types of harm caused by violations of individual autonomy, the framework fails to account for the vast majority of informational harms originating from unjust data relations. Indeed, certain aspects of individual informational harm fall squarely within neoliberal frameworks of individual responsibility. For example, AI microtargeting has engendered devastating consequences for consumers’ exercise of meaningful choice.<sup>263</sup> Recently, microtargeting has also infiltrated the core public forums of democratic civil society—through the programmatic circulation of disinformation in election campaigns.<sup>264</sup> These individual informational harms are already covered by existing data privacy laws and the notice-and-consent disclosure regimes—despite that their enforcement is still far from perfect.<sup>265</sup> Under these laws, consumers could bring tort actions to redress and recover from these types of individual informational harms.<sup>266</sup>

Even though the options for legal recourse are severely limited, existing privacy laws do in fact contemplate individual informational harm. Generally, individual informational harm is accounted for in laws governing: (1) consent-less data collection,<sup>267</sup> (2) denial of informational access,<sup>268</sup> (3) consent-less disclosure of personal data (*i.e.*, data breaches),<sup>269</sup> and (4) use of inaccurate information in credit

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<sup>263</sup> See generally Amelia Arsenault, *Microtargeting, Automation, and Forgery: Disinformation in the Age of Artificial Intelligence*, UNIV. OF OTTAWA, FACULTY OF PUB. & INT’L AFFAIRS RES. PAPER NO. 6634641 (2020), <https://ruor.uottawa.ca/handle/10393/40495>

<sup>264</sup> See Kimberly Rhum, *Information Fiduciaries and Political Microtargeting: A Legal Framework for Regulating Political Advertising on Digital Platforms*, 115 NW. U.L. REV. 1829, 1843-48 (2021).

<sup>265</sup> See Viljoen, *supra* note 37, at 595-97.

<sup>266</sup> See Alicia Solow-Niederman, *Beyond the Privacy Torts: Reinvigorating a Common Law Approach for Data Breaches*, 127 YALE L.J. FORUM 614, 625 (2018) (discussing a possibility for commencing privacy tort action against data holders, under the theory that such data holders are “information fiduciaries” owing a fiduciary duty to people from whom data is collected).

<sup>267</sup> Consent-less data collection is conceptualized as a harm to autonomy and dignity by denying the person whose information is collected the right to informational self-determination. See ALAN F. WESTIN, *PRIVACY AND FREEDOM: LOCATING THE VALUE IN PRIVACY* 7 (1967). See also Viljoen, *supra* note 37, at 595.

<sup>268</sup> When people are denied access to information about themselves, informational self-determination is also harmed. See Shyamkrishna Balganes, *Privative Copyright*, 73 VAND. L. REV. 1, 8-20 (2020). See also Viljoen, *supra* note 37, at 596.

<sup>269</sup> Unauthorized disclosure may cause immediate harm (*e.g.*, reputational harm) that is redressable under existing tort law. In other circumstances, unauthorized disclosure may result in identity theft or stalking. State statutes also directly address data breaches. See, *e.g.*, N.Y. GEN. BUS. LAW §§ 899-

reporting.<sup>270</sup> But, under existing law, individual informational harm is redressable only if such harm constitutes a violation of some aspect of individual autonomy or dignity<sup>271</sup>—*e.g.*, right to access, right to identification, right to be informed, right to withdraw consent, right to accurate information, and right to be forgotten.<sup>272</sup> Individual informational harms that fall outside the domain of autonomy intrusions are legally indescribable (and consequently unrecoverable) under existing statutory and doctrinal frameworks.

With regards to social informational harms, existing legal regimes are even less than ill-equipped—they are entirely absent from the current legal lexicon. Currently, no law in the U.S. has accepted a theory of data governance beyond the protection of individual autonomy or dignity. Even the European Union’s General Data Protection Regulation (GDPR)—supposedly the “strongest data privacy and security law in the world”<sup>273</sup>—fails to account for social informational harms resulting from unjust relations of data production, circulation, and retainment.<sup>274</sup> In strengthening consumers’ control over the terms of data extraction and use, dignitarian data-governance regimes such as the GDPR seek to rebalance the power disparities between data-collectors (owners/users of AI) and data-subjects (consumers) within the vertical relations of informational control.<sup>275</sup> But these regimes ultimately “fail to apprehend the structural conditions driving the behavior they aim to address.”<sup>276</sup>

Consider the following hypothetical: Suppose we live in a GDPR-like regime where consumer A<sub>0</sub> is applying for a loan from a creditor who uses AI to underwrite credit. A<sub>n</sub> denotes prospective consumers or nonparties who are categorized by AI to be in the same behavioral group or archetype as A<sub>0</sub>. In this case, granting

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AA-BB. For federal level data protection laws, *see* Health Insurance Portability and Accountability Act of 1996 (HIPAA), Pub. L. No. 104-91, 110 Stat. 1936.

<sup>270</sup> *See* Fair Credit Reporting Act of 1970 (FCRA) (codified at 15 U.S.C. §§ 1681, 1681i).

<sup>271</sup> The strongest data privacy law to date, the European Union’s General Data Protection Regulation, O.J. L. 127 (2016) (hereinafter GDPR), derives its theory of privacy and data protection from the Kantian dignitarian conceptions of data as expression of the self, “subject to deontological requirements of human dignity.” Viljoen, *supra* note 37, at 623 n.132.

<sup>272</sup> The GDPR includes “the right to be forgotten”—*i.e.*, the right to request erasure of personal data from the Internet—as one of the eight fundamental data privacy rights. *See* ONETRUST, COMPLETE GUIDE TO GENERAL DATA PROTECTION REGULATION (GDPR) COMPLIANCE (Apr. 16, 2021), <https://www.onetrust.com/blog/gdpr-compliance/>. Currently, the U.S. has not implemented the right to be forgotten. Some legal experts opine that the right to be forgotten is unlikely going to be implemented in the U.S. due to First Amendment free expression constraints. *See* Danielle Bernstein, *Why the “Right to be Forgotten” Won’t Make it to the United States*, MICH. TECH. L. REV. ONLINE (2020), <https://mtlr.org/2020/02/why-the-right-to-be-forgotten-wont-make-it-to-the-united-states/>

<sup>273</sup> EUROPEAN COUNCIL, THE GENERAL DATA PROTECTION REGULATION (last reviewed on Sep. 1, 2022), <https://www.consilium.europa.eu/en/policies/data-protection/data-protection-regulation/>

<sup>274</sup> *See* Viljoen, *supra* note 37, at 628-29.

<sup>275</sup> *See id.* at 629.

<sup>276</sup> *Id.*

consumer  $A_0$  a right to protect herself from having her personal data used against her does not prevent the AI from using her data to the detriment of others outside of the vertical data relation (such as  $A_n$ ). The data can also be used against  $B_n$  to the extent that group  $A_n$  overlaps with  $B_n$ . Presumably, if both  $A_0$  and  $A_n$  are applying for the same type of loan, both consumers will have the same interest in retaining and controlling their personal data. Yet, here, dignitarian data privacy protections would protect  $A_0$ 's interests to the exclusion of  $A_n$ . As demonstrated in this hypothetical, even the most progressive dignitarian data governance systems to date are incomplete in their attempts to redress social informational harm.

## 2. Exploitation as Algorithmic Decisional Harm

Once we recognize that algorithmic informational harms are both individually and socially constituted in unjust data relations, two implications follow: *First*, algorithmic exploitation is a result of certain market actors capitalizing on unjust relations of data production and circulation, rather than outcomes of discrete individual conduct by these powerful actors. Thinking of exploitation in relational terms helps us reveal the various dimensions of market unfreedoms which neoclassical “coercion-based” frameworks of exploitation tend to obscure.<sup>277</sup> *Second*, exploitation and discrimination are two mutually-reinforcing systems of injustice, rather than separate domains of wrong. Classical legal theories tend to imagine discrimination as one’s discrete acts or practices misrecognizing another’s identity or status—*i.e.*, making decisions based on one’s immutable characteristics like race and gender.<sup>278</sup> They tend to contrast discrimination from exploitation, which is imagined to be contextualized and socially-embedded. However, in reality, status and identity are always embedded in inherited social relations; they are

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<sup>277</sup> See Richard A. Epstein, *The Neoclassical Economics of Consumer Contracts*, 92 MINN. L. REV. 803, 808-09 (2007) (espousing a neoclassical view of exploitation in consumer markets). Cf. Oren Bar-Gill, *Bundling and Consumer Misrepresentation*, 73 U. CHI. L. REV. 33 (2006) (articulating a behavioral economics approach to consumer exploitation).

<sup>278</sup> The original theory of immutability is based on the idea that the constitutional guarantee of equal protection protects human traits that are inherent and not chosen. This concept has been criticized as being “both over- and under-inclusive.” See Kenji Yoshino, *Assimilationist Bias in Equal Protection: The Visibility Presumption and the Case of “Don’t Ask, Don’t Tell,”* 108 YALE L.J. 485, 504 (1998). Now, a new theory of immutability has become dominant. In *Obergefell v. Hodges*, the Supreme Court observed that “sexual orientation is both a normal expression of human sexuality and immutable.” *Obergefell v. Hodges*, 135 S. Ct. 2584, 2596 (2015) (emphasis added). Many federal courts have adopted the new understanding of immutability. The new inquiry is “not whether a characteristic is strictly unchangeable, but whether the characteristic is a core trait or condition that one cannot or should not be required to abandon.” *Obergefell v. Wymyslo*, 962 F.Supp.2d 968, 990 (S.D. Ohio 2013). See also *Latta v. Otter*, 771 F.3d 456, 464 n.4 (9th Cir. 2014) (internal quotations omitted) (“We have recognized that sexual orientation and sexual identity are immutable; they are so fundamental to one’s identity that a person should not be required to abandon them.”).

continually updated, expressed, and contextualized.<sup>279</sup> What this means is that discrimination often overlaps with exploitation: when one group is consistently subject to discrimination, members of that group becomes more easily exploitable.<sup>280</sup> This creates a vicious cycle where inherited social relations of vulnerability produce conditions of status-subordination, leading to the intensification of economic precariousness and the reproduction of inherited social inequalities.<sup>281</sup>

In its current adaptations, AI perpetuates the vicious cycle by creating the structural conditions for owners/users of AI systems to exploit those who are situated in unjust data relations. Here, the mechanism for exploitation is algorithmic decisional harm—*i.e.*, injuries consumers incur when algorithms extract rents from consumers by acting upon the individual- and market-level insights generated through the control and maintenance of unjust data relations. Most commonly, AI exploits consumers by taking advantage of consumers’ market-induced insecurities or cognitive flaws through using harvested consumer data against the consumers.<sup>282</sup>

(i) *Dimensions of Exploitation*: Like informational harms, decisional harms operate on both individual and social dimensions. Generally, decisional harm manifests in the form of price discrimination, which occurs on three different levels: (1) first-degree price discrimination (FDPD), referring to businesses charging the maximum possible price for each unit consumed; (2) second-degree price discrimination (SDPD), referring to businesses charging different prices for different quantities consumed; and (3) third-degree price discrimination (TDPD), referring to businesses charging different prices to different consumer groups.<sup>283</sup> Although these forms of decisional harm are “discriminatory” in *substance*, they are not cognizable *forms* of discrimination under existing legal definitions. As

<sup>279</sup> See Jessica A. Clarke, *Against Immutability*, 125 YALE L.J. 2, 11-12, 91 (2015).

<sup>280</sup> See Sarah Ganty, *Poverty as Misrecognition: What Role for Antidiscrimination Law in Europe?*, 21 HUM. RIGHTS L. REV. 962, 964 (2021) (“Because of long-standing discrimination against them, these groups have been experiencing structural socioeconomic disadvantages which are extremely difficult to overcome. In this context, misrecognition is the cause of misdistribution.”)

<sup>281</sup> The intersection between discrimination and exploitation is amply researched by studies on educational inequality, geographic inequalities, workplace discrimination, parenting, access to cred, and incarceration. See Scott Winship, Richard V. Reeves & Katherine Guyot, *The Inheritance of Black Poverty: It’s All About the Men*, BROOKINGS INST. (Mar. 22, 2018), <https://www.brookings.edu/research/the-inheritance-of-black-poverty-its-all-about-the-men/>. In social and behavioral medicine empirical research, the relationship between discrimination, inherited inequalities, and physical health are also well studied. See, e.g., Katharine Zeiders, Adriana Umaña-Taylor, Laudan Jahromi, Kimberly Updegraff & Rebecca White, *Discrimination and Acculturation Stress: A Longitudinal Study of Children’s Well-Being from Parental Development to 5 Years of Age*, 37 J. DEV. & BEHAV. PEDIATRICS 557, 564 (2016).

<sup>282</sup> See Bar-Gill, Sunstein & Talgam-Cohen, *supra* note 39.

<sup>283</sup> See Alexandra Twin, *What Is Price Discrimination, and How Does It Work?*, INVESTOPEDIA (last updated on Jun. 13, 2022).

extensions of the constitutional guarantee of equal protection, existing fair lending laws only protect consumers from disparate treatment or impact on the basis of consumers' immutable characteristics.<sup>284</sup> However, price discrimination is fluid, relational, and contextualized in the imbalances of market power. Price discrimination reflects the extraction of rent and surplus from consumers through manipulating market demand and controlling consumers' perception of viable market alternatives.<sup>285</sup> It is more "exploitative" than "discriminatory" under the classical legal definitions.

With the use of AI, each level of exploitation can pile on the effects of another. Consider, for example, a creditor seeking to expand its business into a new community. The creditor purchases from data aggregators a right to access a private database containing vast volumes of alternative data regarding what people in the target community consume, purchase, desire, and browse online on a daily basis. This private database sources its data from a wide range of intermediaries that collect personal data from mobile APPs, websites, tracking devices, and social media—and it happens to include data about me collected from my daily iPhone usage. The data reveals that my family currently suffers from a short-term liquidity crisis because I have been laid off from my manufacturing job. It also learns, from reading my search history, that I need quick cash to pay medical expenses for my uninsured family member who has been injured in an accident. The creditor can then micro-target me with advertisements and recommend a loan that could allow me to defer interest payment for the first month (but I will have to pay a higher compounding interest after the first month according to the terms of agreement). I accept the terms because I don't have alternatives. Here, the creditor has engaged in FDPD against me. Suppose that, after one month, I am lucky enough to find a new job and my financial situation has been alleviated. I am no longer in need of short-term loans, but I don't yet have enough cash to pay off the entire principal and interest accrued from my previous debt. The creditor can then recommend a new package that allows me to further defer the interest, but under the condition that I borrow more. I end up accepting a combined loan package that is much more costly than others who are similarly situated. Here, the creditor has engaged in SDPD. Now, suppose further that another individual from my community who has similar income levels, family obligations, savings and consumption levels as me is looking for new sources of credit. Like me, she has low credit scores and struggled to obtain loans from a large bank. Using the information harvested from me, the payday lender can engage in the same pattern of microtargeting against her and trap her into a cycle of indebtedness. Here, the creditor has engaged in TDPD. In this

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<sup>284</sup> The fair lending laws (ECOA and FHA) were legislated by Congress pursuant to its power under the Enforcement Clause of the 14<sup>th</sup> Amendment. See U.S. CONST. amend. XIV, § 5.

<sup>285</sup> See Oren Bar-Gill, *Algorithmic Price Discrimination When Demand Is a Function of Both Preferences and (Mis)perceptions*, 86 U. CHI. L. REV. 217, 237-42 (2019).

example, AI dramatically lowers the business cost for creditors to engage in these three levels of price discrimination. If price discrimination was ever “too expensive” in the pre-AI era, then AI has made price discrimination a profitable business.<sup>286</sup> With AI, creditors can more accurately target vulnerable consumers through the scraping, processing, and analyzing mass volumes of consumer data obtained from the data aggregators.

(ii) *Who Suffers from Decisional Harm?* The short answer: individuals and communities who are status-subordinated or socially marginalized are the ones who are disproportionately subject to AI exploitation. The disproportionality of AI decisional harm is certainly not surprising, since minorities and status-subordinated people tend to bear the brunt of every technological adaptation in the long history of American racial capitalism.<sup>287</sup> The same occurred with the rise of the Lowell System, the assembly line, telecommunications technology, global value chains, and more recently, robo-automation—with each system creating new conditions for the exploitation of precarious classes of people and the perpetuation of unjust modes of production.<sup>288</sup> Unless the material underpinnings of market dependency which undergird unjust relations of production are changed, there is no obvious reason why AI-driven technological change will deviate from this pattern.

Here, it is also important to recognize that the impact of AI exploitation is *intersectional*—*i.e.*, the interweaving inequalities of race, class, and gender are

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<sup>286</sup> From the neoclassical perspective, discrimination is costly to individual businesses as well as to the economy because it leaves good talent on the table. In the context of employment discrimination, for example, scholars have argued that discrimination is suboptimal and irrational because it causes misdirection of investment from high-quality human capital. *See, e.g.*, Kilian Huber, *How Discrimination Harms the Economy and Business*, CHI. BOOTH REV. (Jul. 15, 2020); Crosby Burns, *The Costly Business of Discrimination*, CTR. FOR AM. PROGRESS (Mar. 22, 2012); David A. Strauss, *The Law and Economics of Racial Discrimination in Employment: The Case for Numerical Standards*, 79 GEO L.J. 1619 (1991).

<sup>287</sup> Technology is endogenous to the market relations of production which undergird systems of injustice. It is not, as many neoclassical economists assume, exogenous to relations of social inequality. In the Age of Industrial Revolution, innovations in factory management such as the Lowell System created conditions for the exploitation of women and children workers. In the Gilded Age, the rise of heavy industry and integrated markets created conditions for the exploitation of immigrant workers. In the Age of De-Industrialization, the advent of global value chains caused the hollowing out of American manufacturing communities and the globalization of exploitation from Global North to the Global South. In the Age of Information Technology, the rise of telecommunications and computerization created conditions for financialization of the American economy and concentration of wealth in the top 1%. Racial capitalism is the common thread weaving each technological development. Thus, unless the material underpinnings of market dependency are changed, AI-driven technology will likely follow the same pattern. *See generally* Yochai Benkler, *The Role of Technology in Political Economy*, THE LAW & POLITICAL ECONOMY PROJECT (Jul. 25, 2018), <https://lpeproject.org/blog/the-role-of-technology-in-political-economy-part-1/>

<sup>288</sup> *See id.*

often mutually-reinforcing and embedded, instead of subsumed under any single source of inequality.<sup>289</sup> In the context of consumer credit, the intersectionality of oppressions is reflected by what some see as the “cost of being poor.”<sup>290</sup> Already in the pre-AI era, most “underbanked” and “unbanked” communities tend to be populated by immigrants, racial minorities, and socially-marginalized groups.<sup>291</sup> They also tend to be the ones who have lower income, fewer savings, and narrower exposures to the credit system. Consequently, these people tend to be the ones with higher credit risks and lower credit ratings. Without access to the full range of banking services, these consumers are also excluded from obtaining credit to make larger purchases or engage in activities that typically raises one’s future credit scores.<sup>292</sup> With the introduction of AI to consumer credit, status-subordinated people are now even more readily targetable and exploitable by creditors. Even though AI has made it easier for vulnerable consumers to obtain loans, the problem is that these loans are highly exploitative and detrimental to their long-term financial wellbeing.<sup>293</sup>

From a sociological perspective, unjust data relations create the fertile soil for turning AI technologies into conduits for further marginalization, status subordination, and reproduction of social inequalities—resulting in what some have called “a new form of digital redlining.”<sup>294</sup> Unlike the historical discriminatory practice of racial redlining where communities of color are outright denied access to credit and banking services, digital redlining is not a visible set of discrete invidious practices.<sup>295</sup> Instead, digital redlining describes unjust market relations

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<sup>289</sup> See Vanessa Ceia, Benji Nothwehr & Liz Wagner, *Gender and Technology: A Rights-Based and Intersectional Analysis of Key Trends*, OXFAM RESEARCH BACKGROUNDER 44-49 (2021).

<sup>290</sup> See Craig Landes, *The Cost of Being Poor: Why It Costs So Much to Be Poor in America*, FINMASTERS (Sep. 5, 2022), <https://finmasters.com/cost-of-being-poor/>

<sup>291</sup> In 2018, the CFPB estimates that at least 26 million Americans are “credit invisible,” and that 19 million Americans lack sufficient credit history (*i.e.*, “un-scorable”). Credit invisibility impacts some groups more than others, as about 27-28% of minority populations are either credit invisible or un-scorable. See Patrice Ficklin & J. Frank Vespa-Papaleo, *Building a bridge to credit visibility: a report on the CFPB’s credit visibility symposium*, CONS. FIN. PROT. BUR. (Jul. 19, 2019), <https://www.consumerfinance.gov/about-us/blog/report-credit-visibility-symposium/>

<sup>292</sup> See Luke Herrine, *Credit Reporting’s Vicious Cycles*, 40 N.Y.U. REV. L & SOC. CHANGE 305, 336, 338-39 (2015).

<sup>293</sup> See Terri Friedline, Sruthi Narahariseti & Addie Weaver, *Digital Redlining: Poor Rural Communities’ Access to Fintech and Implications for Financial Inclusion*, 24 J. OF POVERTY 517 (2020).

<sup>294</sup> See, *e.g.*, RUHA BENJAMIN, RACE AFTER TECHNOLOGY: ABOLITIONIST TOOLS FOR THE NEW JIM CODE (2019); Robinson Meyer, *Could a Bank Deny Your Loan Based on Your Facebook Friends?* THE ATLANTIC (Sep. 25, 2015), <https://www.theatlantic.com/technology/archive/2015/09/facebooks-new-patent-and-digital-redlining/407287/>

<sup>295</sup> See Erik J. Martin, *What is Redlining? A Look at the History of Racism in American Real Estate*, BANKRATE (Feb. 8, 2023), <https://www.bankrate.com/mortgages/what-is-redlining/#faq>

causing informational technologies to be used in ways that intensify and reproduce systemic inequalities—through the production and circulation of digital information motivating businesses to underinvest or divest from communities that are most in need of financial resources.<sup>296</sup> In communities subject to digital redlining, individuals are more likely going to experience the deprivation of socioeconomic opportunities.<sup>297</sup> This also leads to an intensification of dependence on unjust market relations. If AI-driven technological innovation continues to occur at the current pace without any meaningful change to the existing relations of data production and circulation, the proliferation of AI in credit underwriting will have devastating consequences for credit inequality in the near future.

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Back to neoliberalism. Recall from our earlier discussions that the existing consumer financial protection laws are principally preoccupied with protecting *free market* and *consumer autonomy*. For neoliberals, ensuring the dis-embeddedness of markets from social or governmental influences is the precondition to fostering any meaningful consumer choice. Yet, no market can ever exist without the governmental or social relations that are embedded within. The components of market are also subject to bias and manipulation: market price-signals cannot be value-free; consumer preferences do not exist in a vacuum; consumer consent can be easily manufactured through technologies of information control. The advent of AI only revealed to us what should have been the obvious: that the neoliberal ideals of *free market* and *consumer autonomy* are only figments of a pipedream.

The failures of neoliberalism are even more salient in the face of enclosed AI digital environments where prices are engineered and consent is manufactured. Contrary to neoliberal presumptions, algorithmic harm are not results of discrete individual conduct by users/owners of the AI system. Rather, algorithmic harm stems from unjust relations of data control, production, and circulation—systems of oppression that are both socially and individually constituted. These harms manifest in the form of commodification and exploitation. To establish a new legal infrastructure to address these harms, we must move beyond the current individualist, dignitarian frameworks of AI governance. The next section discusses how.

### III. BEYOND NEOLIBERALISM: AVENUES FOR LEGAL REFORM

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<sup>296</sup> See Zack Quaintance, *What is Digital Redlining? Experts Explain the Nuances*, GOVERNMENT TECHNOLOGY (Mar. 28. 2022), <https://www.govtech.com/network/what-is-digital-redlining-experts-explain-the-nuances>

<sup>297</sup> Recently, the CFPB has announced that addressing digital redlining is among the bureau's regulatory priorities. See CFPB, *CFPB and Federal Partners Confirm Automated Systems and Advanced Technology Not an Excuse for Lawbreaking Behavior*, CFPB NEWSROOM (Apr. 25, 2023).



So far, our analysis has largely been centered on how neoliberal myths of *free market* and *consumer autonomy* have enabled new forms of exploitation in AI-mediated credit markets. A lingering question is how we plan to move forward. But, before we lay out the specific steps for a programmatic transformation of the credit underwriting industry, it is vital for us to first clarify what this article is not.

First, this article is *not* a call for the abandonment of market-based solutions. While a central objective of this article is to debunk the various neoliberal myths of market freedom and dis-embeddedness, this article by no means seeks to discard or eliminate private markets. While these myths obviously have their problems, *free market* and *consumer autonomy* still embody dignitarian and emancipatory ideals that are worth aspiring towards. The problem is not that they were inherently wrong. The core problem is twofold: (1) these ideals were politicized and turned into weapons to banish conceptual alternatives that are equally valuable in other contexts; (2) our legal system has canonized these ideals and entrenched a system where alternatives are not possible.

Second, this article is *not* an invitation for the re-entrenchment of state power. While public and hybrid options for regulation can counteract the vices of full privatization, completely substituting the market's role in credit provision with that of the state would be the wrong solution. The state is as fallible as markets—given its susceptibility to capture, graft, and inefficiency.<sup>298</sup> Historically, states, not markets, were responsible for inflicting some of the worst human tragedies.<sup>299</sup> Here, our aim is to design a legal infrastructure (arranging a particular set of institutional interactions between state and markets) that fosters meaningfully dignified access to credit, knowing that both states and markets are deeply imperfect.<sup>300</sup>

Third, this article is *not* an indictment of AI. Like all technological innovations in the past, AI can be harnessed to enhance sustainable productivity and improve the general human condition of work-life. With far superior computational power and analytical speed than humans, AI offers endless opportunities for improving

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<sup>298</sup> See Daron Acemoglu & James A. Robinson, *Rents and Economic Development: The Perspective of Why Nations Fail*, 181 PUB. CHOICE 13, 28 (2019) (discussing how extractive political institutions designed for elite capture lead to the establishment of extractive economic institutions that function to perpetuate elite capture rather than foster inclusive economic development).

<sup>299</sup> See, e.g., AMARTYA SEN, DEVELOPMENT AS FREEDOM 16, 160-89 (1999) (discussing the occurrence of artificial famines in colonial territories, one-party states, and military dictatorships); DARON ACEMOGLU & JAMES A. ROBINSON, WHY NATIONS FAIL: THE ORIGINS OF POWER, PROSPERITY, AND POVERTY 1, 415-50 (2013) (discussing extractive institutions as the cause for state failure).

<sup>300</sup> See José Reis, *The State and the Market: An Institutional and Relational Take*, 4 RCCS ANN. REV. 1 (2012) (urging scholars and policymakers to take an institutional perspective of state-market relations, which views states and markets as mutually-embedded and mutually-disciplining forces).

the quality of life.<sup>301</sup> The core problem of informational injustice in consumer credit is *how* AI is used by the market’s key players, and *what* market relations are causing AI to be harnessed for the worsening instead of the betterment of the credit inequality. Once we understand technological adaptations are in fact embedded in the market relations of dependency, production, and consumption, it becomes clear that the problem is not AI itself, but the relations behind its adaptations.<sup>302</sup>

Rather, this article is a wakeup call for lawmakers, judges, and regulators to move beyond the existing neoliberal regulatory paradigms. As the last five decades of poverty intensification and systemic credit inequality have shown, neoliberalism has utterly failed its promise of delivering meaningful equal credit access protection. The failures of neoliberalism are becoming even more salient today in the age of informational capitalism, as AI has exposed the fundamental inconsistencies and weaknesses of *free market* and *consumer autonomy* presumptions of regulation. Thus, if there is ever an appropriate moment to rethink neoliberal paradigms of lending justice, right now is the perfect time. The following sections sketches both (1) a normative critique of existing proposals on the table, and (2) a proposal for a new legal infrastructure for AI governance to ensure that AI technologies are being adapted in ways that foster equitable and just social relations in credit markets.

#### A. *Critiques of Existing Proposals for AI Governance*

This section focuses on the ways in which some of the most prevalent proposals for legal reform on the table have ignored the *relational* aspects of algorithmic harm. With some variations, most proposals advocate for: (1) enabling regulatory inspection of algorithmic inputs used in AI credit models by means of mandatory disclosure; (2) expanding the legal definition of “discrimination” under existing fair lending laws to cover creditor practices resulting in disparate impact; and (3) delegating regulatory burden to private markets through fostering technological entrepreneurship investing in the development of “RegTech” solutions.<sup>303</sup>

What all three proposals have in common is treating algorithmic harm as outcomes of discrete individual acts or practice of creditors, divorced from the context and social relations through which such harms are produced. While each proposal addresses a particular dimension of algorithmic injustice, none of them challenge the flawed assumptions of individual responsibility—a model of credit

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<sup>301</sup> See THE WHITE HOUSE, BLUEPRINT FOR AN AI BILL OF RIGHTS 4, 8-11 (Oct. 2022).

<sup>302</sup> See Benkler, *supra* note 194. See also Natascia Boeri, *Technology and Society as Embedded: An Alternative Framework for Information and Communication Technology and Development*, 38 MEDIA, CULTURE & SOCIETY 107, 118 (2016).

<sup>303</sup> The term “RegTech” (*i.e.*, regulatory technology) refers to a class of software applications or algorithmic innovations for managing regulatory compliance. See generally Jake Frankenfield, *RegTech: Definition, Who Uses It and Why, and Example Companies*, INVESTOPEDIA (Aug. 27, 2020), <https://www.investopedia.com/terms/r/regtech.asp>

governance that has been deeply entrenched in the current regulatory consciousness since the 1970s. Existing proposals are, by and large, progenies of the neoliberal consensus. While few serious scholarship is continuing to advocate for the de-regulation of AI (even among neoliberals), their proposals continue to draw extensively from the neoliberal rulebook—that is, to restore perfect markets and rational market agents through disclosure and removing choice constraints. But, as the following paragraphs will show, such efforts tend to miss the target.

### 1. The Futility of Algorithmic Input Scrutiny

The dominant approach to AI governance in consumer credit is to enhance regulatory visibility into how algorithmic inputs—*i.e.*, raw consumer data—are being processed by AI models in the credit underwriting processes. To implement this approach, proponents of input scrutiny argue that regulators should demand creditors and data aggregators to disclose AI training data, computational formulas, and software source codes to federal agencies by means of regulatory fiat.<sup>304</sup> Data transparency would help regulators better identify discriminatory practices, patterns, and hold creditors accountable under existing fair lending laws. In this regard, input scrutiny shares the same goals of most existing disclosure mandates: (1) enhancing price transparency;<sup>305</sup> (2) facilitating informed consumer choice by creating the infrastructure for fair market competition and cost comparison;<sup>306</sup> and (3) nudging consumer choice towards welfare-optimizing financial products.<sup>307</sup> From the proponents’ point of view, the AI-mediated credit market is sufficiently opaque and unfair that even the most devout neoliberals should find the present conditions to be a “market failure” (which justifies regulatory intervention).

The algorithmic input scrutiny proposal presents two obvious advantages. *First*, this approach can easily fit into the existing notice-and-consent frameworks of fair lending. For instance, under Regulation B (implementing the ECOA), creditors

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<sup>304</sup> See CFPB, *CFPB Acts to Protect the Public from Black-Box Credit Models Using Complex Algorithms* (May 26, 2022), <https://www.consumerfinance.gov/about-us/newsroom/cfpb-acts-to-protect-the-public-from-black-box-credit-models-using-complex-algorithms/>

<sup>305</sup> See Jermy Prenio & Jeffery Yong, *Humans Keeping AI in Check—Emerging Regulatory Expectations in the Financial Sector*, FINANCIAL STABILITY INSTITUTE POLICY IMPLEMENTATION NO. 35, at 14-15 (Aug. 2021); *but see* Andrew Burt, *The AI Transparency Paradox*, HARVARD BUSINESS REVIEW (Dec. 13, 2019), <https://hbr.org/2019/12/the-ai-transparency-paradox>

<sup>306</sup> See generally Angela A. Hung, Min Cong & Jeremy Burke, *Effective Disclosures in Financial Decisionmaking*, RAND RESEARCH REPORT RR-1270-DOL (Jul. 2015); Jeanne M. Hogarth & Ellen A. Merry, *Designing Disclosures to Inform Consumer Financial Decisionmaking: Lessons Learned from Consumer Testing*, FEDERAL RESERVE BULLETIN (Oct. 21, 2011), <https://www.federalreserve.gov/pubs/bulletin/2011/articles/designingdisclosures/default.htm>

<sup>307</sup> See generally RICHARD THALER & CASS SUNSTEIN, *NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS* (2008); Cynthia Weiyi Cai, *Nudging the Financial Market? A Review of the Nudge Theory*, 60 ACCOUNTING & FINANCE 3341, 3357-60 (2020).

taking an adverse action against a loan applicant is required to deliver to the applicant “a notification in writing” containing “a statement of specific reasons” for the adverse action “within 30 days” after taking such action.<sup>308</sup> Otherwise, the creditor is deemed to have violated ECOA (*i.e.*, a strict liability regime). If implemented, the input scrutiny mandate will phase out the use of “black-box” AI models in credit models.<sup>309</sup> Creditors seeking to comply with ECOA’s adverse action notice requirements will be incentivized to adopt “white-box” AI models to underwrite consumer credit.<sup>310</sup> *Second*, enhancing algorithmic input aligns with the current regulatory agenda to push for more individualist, dignitarian data privacy reforms. In March 2023, the CFPB promulgated a final rule<sup>311</sup> pursuant to its powers under section 1033 of the Dodd-Frank Act to compel creditors to share with consumers any data they have collected about them.<sup>312</sup> The 2023 consumer financial data rule moved federal-level financial data regulation in the U.S. one step towards convergence with the GDPR. Any potential input scrutiny rulemaking can build on the existing legal infrastructure of financial data sharing.

Despite its alignment with existing regulatory agendas, the input scrutiny approach fails to meaningfully account for either informational or decisional harms stemming from unjust data relations. Its push for dignitarian reform distracts us from the real source of algorithmic harm, which lies in the creditors’ informational control over horizontal and vertical data flows. At its core, the input scrutiny approach seeks to regress *opaque* markets caused by AI’s price engineering and consent-manufacture back to *transparent* markets prior to AI’s intervention. However, if the material underpinnings of unjust data relations remain unchanged, it is questionable whether more data transparency could lead to meaningful consumer choice and autonomy.

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<sup>308</sup> See 12 C.F.R. § 1002.9.

<sup>309</sup> See Laura Blattner, P-R Stark & Jann Spiess, *Machine Learning Explainability & Fairness: Insights from Consumer Lending*, FINREGLAB 23-24 (Apr. 2022).

<sup>310</sup> See Florian Perteneder, *Understanding Black-Box ML Models with Explainable AI*, DYNATRACE ENGINEERING (Apr. 29, 2022), <https://engineering.dynatrace.com/blog/understanding-black-box-ml-models-with-explainable-ai/>

<sup>311</sup> See, e.g., CFPB, *CFPB Finalizes Rule to Create a New Data Set on Small Business Lending in America*, CFPB NEWSROOM (Mar. 30, 2023), <https://www.consumerfinance.gov/about-us/newsroom/cfpb-finalizes-rule-to-create-a-new-data-set-on-small-business-lending-in-america/>; CFPB, *CFPB Kicks Off Personal Financial Data Rights Rulemaking*, CFPB NEWSROOM (Oct. 27, 2022), <https://www.consumerfinance.gov/about-us/newsroom/cfpb-kicks-off-personal-financial-data-rights-rulemaking/>

<sup>312</sup> Section 1033 of the Dodd-Frank Act provides that “subject to the rules proscribed by the [CFPB], a consumer financial services provider must make available to a consumer information in the control or possession of the provider concerning the consumer financial product or service that that consumer obtained from the provider.” CFPB, *Advance Notice of Proposed Rulemaking: Dodd-Frank Act Section 1033 – Consumer Access to Financial Records*, 85 Fed. Reg. 71003 (Nov. 6, 2020).

Another failure concerns what the regulators *can do* with the data after demanding disclosure and inspection of algorithmic inputs. Currently, under ECOA and FHA, regulators are only authorized to bring enforcement actions against creditors who violate their equal protection obligations and adverse notice requirements. A violation is narrowly defined: it only encompasses discrete individual conduct, such as using suspect factors of race, color, sex, or national origin as parameters carrying weight in the algorithmic decision-making process. Beyond this, the creditor is off the hook. Moreover, mandatory disclosure of algorithmic inputs can give rise to a constitutional challenge under the Fourth Amendment. A warrantless inspection by regulators of proprietary credit-underwriting algorithms can constitute “unreasonable search and seizure” of private property.<sup>313</sup> Even if the input security rule passes judicial review for search and seizure,<sup>314</sup> creditors could claim that the algorithm is a protected trade secret and further thwart the regulators’ efforts.

Even if regulators could demand that creditors remove suspect inputs from the algorithms, it does not address the problem of AI proxy discrimination. Without race or gender inputs, the AI model can still engage in price discrimination because they draw indirect and unsupervised inferences based on engineered data and sources that reflect inherent social preferences.<sup>315</sup> This occurs because AI makes decision by replicating human bias and building on them.<sup>316</sup> The AppleCard, for instance, has recently drawn intense criticism when a male applicant complained that he received a line of credit 20 times higher than that offered to his spouse, even though the two filed joint tax returns, lived in the same community, and owned the same property.<sup>317</sup> Goldman Sachs, the issuer of AppleCard, responded to the complaint that it could not discriminate against her because its algorithms “don’t even use gender as an input”<sup>318</sup> and “do not know your gender” or make decisions

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<sup>313</sup> U.S. CONST. amend. IV.

<sup>314</sup> The dominant judicial test is *New York v. Burger*, 482 U.S. 691 (1987), which held that a warrantless inspection can be reasonable under the Fourth Amendment because the expectation of privacy in commercial property is attenuated in closely regulated industries, where there is heightened government interest in regulation. But to survive a constitutional challenge, the regulators must show that (1) there is “substantial” government interest underlying the regulatory scheme that purports to authorize the inspection at issue; (2) the warrantless inspection is “necessary to further the regulatory scheme”; (3) the inspection program, in terms of capacity and regulatory of its application, provides a constitutionally adequate substitute for warrant.

<sup>315</sup> *See id.*

<sup>316</sup> *See generally* Anya E.R. Prince & Daniel Schwarcz, *Proxy Discrimination in the Age of Artificial Intelligence and Big Data*, 105 IOWA L. REV. 1257 (2020).

<sup>317</sup> *See* James Vincent, *Apple’s credit card is being investigated for discriminating against women*, THE VERGE (Nov. 11, 2019), <https://theverge.com/2019/11/11/20958953/apple-credit-card-gender-discrimination-algorithms-black-box-investigation/>

<sup>318</sup> Will Knight, *The Apple Card Didn’t ‘See’ Gender—and That’s the Problem*, WIRED (Nov. 19, 2019), <https://wired.com/story/the-apple-card-didnt-see-genderand-thats-the-problem/>

“based on factors like gender.”<sup>319</sup> However, Goldman’s explanation is misleading because a gender-blind algorithm could still end up being biased against women as long as it is drawing statistical inference from inputs that happen to correlate with gender, such as purchase history and credit utilization.<sup>320</sup> The instance of AppleCard challenges the notion that removing suspect algorithmic inputs indicating consumers’ protected characteristics can eliminate AI bias.<sup>321</sup>

## 2. The Limits of Disparate Impact

Another proposal is to redefine the concept of discrimination under existing fair lending laws. The proposed course of action is simple: to incorporate the theory of disparate impact into ECOA—a theory of discrimination that is expressly recognized by the Supreme Court in the housing<sup>322</sup> and employment<sup>323</sup> discrimination contexts. The proposal aims to expand the scope of discrimination to encompass creditor practices that disproportionately impact members of a particular group, demographic, affiliation, or community covered by the list of immutable characteristics. This contrasts with the original theory of disparate treatment, which focuses on direct acts of discrimination targeting individuals of a protected group. Unlike the input scrutiny approach, which advocates for change through crafting new substantive rules through the administrative process, the disparate impact approach advocates for change within the current doctrinal frameworks.

Variations of the disparate impact theory have been endorsed by the federal agencies’ interpretative rules. Regulation B, which implements ECOA, mentions the legislative history of ECOA as support for incorporating an “effects test” holding creditors liable for engaging in practices that have a “disproportionately negative impact on a prohibited basis, even though the creditor has no intent to

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<sup>319</sup> Neil Vigdor, *Apple Card Investigated After Gender Discrimination Complaints*, N.Y. TIMES (Nov. 10, 2019), <https://www.nytimes.com/2019/11/10/business/apple-credit-card-investigation.html/>

<sup>320</sup> Ian Carlos Campbell, *The Apple Card doesn’t actually discriminate against women, investigators say*, THE VERGE (Mar. 23, 2021), <https://theverge.com/2021/3/23/22347127/goldman-sachs-apple-card-no-gender-discrimination/>

<sup>321</sup> See, e.g., Talia B. Gillis, *The Input Fallacy*, 106 MINN. L. REV. 1175, 1182-83 (2022); Will Knight, *The Apple Card Didn’t ‘See’ Gender—and That’s the Problem*, WIRED (Nov. 19, 2019), <https://wired.com/story/the-apple-card-didnt-see-genderand-thats-the-problem/>

<sup>322</sup> See *Texas Dep’t of Hous. & Cmty Affairs v. Inclusive Communities Project, Inc.*, 135 S. Ct. 2507 (2015) (recognizing the actionability of disparate impact claims under the FHA).

<sup>323</sup> See, e.g., *Smith v. City of Jackson*, 544 U.S. 228 (2005) (affirming the actionability of disparate impact claims under the Age Discrimination and Employment Act); *Griggs v. Duke Power Co.*, 401 U.S. 424 (1971) (affirming disparate impact under Title VII of the Civil Rights Act of 1964).

discriminate and the practice appears neutral on its face.”<sup>324</sup> Similarly, the U.S. Department of Housing and Urban Development (HUD), responsible for enforcing the FHA, has adopted a new disparate impact rule in 2021 specifically addressing AI bias.<sup>325</sup> HUD’s 2021 rule was the first federal regulatory attempt to craft rules considering whether an algorithm can violate the fair lending laws. Under the rule, a plaintiff is required to allege that (1) “the challenged policy or practice is arbitrary, artificial, and unnecessary to achieve a valid interest or legitimate objective such as practical business, profit, policy consideration, or requirement of law”; (2) there is “a robust causal link between the challenged policy or practice and a disparate impact on members of a protected class”; (3) the challenged policy or practice has “an adverse effect on members of a protected class”; (4) “the disparity caused by the policy or practice is significant”; (5) “the complaining party’s alleged injury is directly caused by the challenged policy or practice.”<sup>326</sup>

Essentially, the HUD’s AI disparate impact rule transforms a claim of algorithmic discrimination into a *tort claim*<sup>327</sup>—conditioning recovery upon a finding of actual injury, breach of duty, and a causal connection between the two.<sup>328</sup>

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<sup>324</sup> 12 C.F.R. § 202. The FRB’s commentary to Regulation B contains the following reference to the effects test, which cites congressional committee reports as support for ECOA disparate impact:

“*Effects test.* The effects test is a judicial doctrine that was developed in a series of employment cases decided by the U.S. Supreme Court under Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e *et seq.*), and the burdens of proof for such employment cases were codified by Congress in the Civil Rights Act of 1991 (42 U.S.C. § 2000e-2 *et seq.*). *Congressional intent that this doctrine applies to the credit area is documented in the Senate Report that accompanied H.R. 6516, No. 94-589, pp. 4-5; and in the House Report that accompanied H.R. 6516, No. 94-210, p.5.* The Act and regulation may prohibit a creditor practice that is discriminatory in effect because it has a disproportionately negative impact on a prohibited basis, even though the creditor has no intent to discriminate and the practice appears neutral on its face, unless the creditor practice meets a legitimate business need that cannot reasonably be achieved as well by means that are less disparate in their impact...”

<sup>325</sup> See U.S. DEPT. OF HOUS. & URB. DEV. (HUD), Reinstatement of HUD’s Discriminatory Effects Standard, 82 Fed. Reg. 33592 (Jun. 25, 2021). See also 78 Fed. Reg. 11460, 11482; *Inclusive Communities*, 135 S. Ct. at 2514-15 (overviewing the HUD’s 2013 rule’s burden-shifting framework).

<sup>326</sup> HUD, HUD’s Implementation of the Fair Housing Act’s Disparate Impact Standard. A Proposed Rule by the Housing and Urban Development Department, 84 Fed. Reg. 42854 (Aug. 19, 2019).

<sup>327</sup> See generally Sandra F. Sperino, *Let’s Pretend Discrimination Is a Tort*, 75 OHIO ST. L. J. 1107 (2014); Sandra F. Sperino, *Rethinking Discrimination Law*, 110 MICH. L. REV. 69 (2011).

<sup>328</sup> The federal courts have also increasingly injected tort concepts into the interpretation of the anti-discrimination provisions of fair lending laws. See, e.g., *City of Miami v. Bank of America Corp.*, 137 S. Ct. 1296, 1299 (2017) (requiring the plaintiff to show that the defendant’s alleged discriminatory policy or practice is a “direct proximate cause” of the injuries suffered by the plaintiff). In *City of Miami*, Justice Breyer wrote that “a claim for damages under the FHA is akin to a ‘tort action,’ and is thus subject to the common-law requirement that loss is attributable ‘to the proximate cause, and not to any remote cause.’” *Id.* at 1299 (citing *Meyer v. Holley*, 537 U.S. 280, 285 (2003) and *Lexmark Intern., Inc. v. Static Control Components, Inc.*, 572 U.S. 118, 132 (2014)).

By injecting tort elements into algorithmic discrimination, the rule moves AI governance one step further towards an individualist, fault-based liability regime. Under this framework, even though consumers are not required to show animus, they are required to prove that the algorithmic harm they have suffered are directly and proximately caused by creditors acts, practices, or omissions. However, like any individualist regime that relies heavily on civil litigation for enforcement, the disparate impact theory will be ineffective for protecting the vast majority of consumers from algorithmic harms. HUD’s AI rule currently places the heavy burden of enforcement on consumers. This rule also significantly increases the consumer’s litigation costs for pre-discovery investigation to garner prima facie evidence.<sup>329</sup>

Furthermore, it is unlikely that disparate impact rule could survive judicial review today, given the strict legal hurdles of statutory interpretation imposed by the Supreme Court. In *Texas v. Inclusive Communities*, the Supreme Court recognized disparate impact claims under FHA but significantly narrowed its scope.<sup>330</sup> In particular, the Court held that the plaintiff bringing a disparate impact violation must establish a “robust causal link” between the challenged practice and the alleged disparities,<sup>331</sup> and that the defendant shall not be deemed to have violated the statute “unless [the practice] is artificial, arbitrary, or unnecessary.”<sup>332</sup> *Inclusive Communities* also limits the applicability of disparate impact outside of housing and employment discrimination contexts. Writing for the majority, Justice Kennedy noted that the Court’s decision to uphold disparate impact in FHA was based on FHA’s direct textual reference to “effects-oriented language” and its textual similarity to other civil rights statutes that the Court has previously held to incorporate disparate impact.<sup>333</sup> However, ECOA contains no comparable “effects-

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Further, the opinion emphasized that, like Title VII and ADEA, FHA is a statute with “common-law foundations,” and that its tort roots have been long recognized by the Court’s precedents. *Id.* (citing *Anza v. Ideal Steel Supply Corp.*, 547 U.S. 451, 457 (1991)).

<sup>329</sup> See Comment of Cathy O’Neil, Before the Office of the Assistant Secretary for Fair Housing and Equal Opportunity, HUD: Comment Regarding Docket NO. FR-6111-P-02 (Christopher Bavitz, Mason Kortz, Tea Skela & James Holloway, on behalf of Cathy O’Neil) (Oct. 2019), <https://clinic.cyber.harvard.edu/files/2019/10/HUD-Rule-Comment-ONEIL-10-18-2019-FINAL.pdf>

<sup>330</sup> *Inclusive Communities*, 135 S. Ct. at 2519-21.

<sup>331</sup> *Id.* at 2512.

<sup>332</sup> Paul Hancock & Andrew C. Glass, *Symposium: The Supreme Court Recognizes But Limits Disparate Impact In Its Fair Housing Act Decision*, SCOTUS BLOG (Jun. 26, 2015), <https://www.scotusblog.com/2015/06/paul-hancock-fha/>

<sup>333</sup> FHA makes unlawful any act “to refuse to sell... or otherwise make unavailable or deny, a dwelling to a person” because of a protected characteristic, while referring to the “consequences of actions” as a basis for imposing liability. *Inclusive Communities*, 135 S. Ct. at 2519-21. Similarly, both Title VII of the Civil Rights Act of 1964 (“Title VII”) and the Age Discrimination in Employment Act (ADEA) contained language prohibiting actions that “deprive any individual of



oriented” language in the statutory text.<sup>334</sup> Given the Supreme Court’s current composition and penchant for textualist/originalist interpretation, any federal regulatory attempt to incorporate disparate impact into ECOA will likely not survive judicial review.

### 3. The Illusory Promises of “RegTech”

The emergence of “RegTech”—*i.e.*, information technologies used by financial institutions to address the challenges posed by FinTech and ensure regulatory compliance—presents an alternative to the top-down regulatory initiatives discussed earlier.<sup>335</sup> In general, RegTech encompasses a wide range of technological solutions, including those used to detect and prevent financial fraud, safeguard consumer data protection, optimize asset-liability management, monitor anti-money laundering, and automate tax/financial reporting.<sup>336</sup>

At its core, RegTech promises to safeguard equal credit access protection by tapping the strength of competitive financial markets to self-correct, adapt, and innovate.<sup>337</sup> Proponents of RegTech argue that, by investing in informational technologies regulating AI, the market can solve its own problems through entrepreneurship and innovation—*i.e.*, “pure” market processes untainted by regulatory paternalism. They also envision RegTech to be the perfect solution to balance free markets against market-generated injustices, a pathway for financial institutions to redeem themselves. In the era of congressional deadlock and

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employment opportunities or *otherwise adversely affect* his status... because of... race or age.” *See id.* at 2517 (citing *Smith v. City of Jackson*, 544 U.S. 228, 235 (2005) and *Griggs v. Duke Power Co.*, 401 U.S. 424 (1971)). All three anti-discrimination statutes compared in *Inclusive Communities*—FHA, Title VII, and ADEA—contained effect-oriented phrases such as “otherwise make unavailable” in their operative texts. *See id.* at 2525.

<sup>334</sup> ECOA only states that “it shall be unlawful for any creditor to discriminate against any applicant,” without explicit reference to impact or the consequences of acts. 15 U.S.C. § 1691(a). *Cf.* Fair Housing Act (codified at 42 U.S.C. § 3604), Title VII of the Civil Rights Act of 1964 (codified at 42 U.S.C. § 2000e-2).

<sup>335</sup> *See, e.g.*, Ben Charoenwong, Zachary Kowaleski, Alan P. Kwan & Andrew Sutherland, *RegTech: What It Is and Why It Matters*, UNIVERSITY OF OXFORD BUSINESS LAW BLOG (Feb. 23, 2022), <https://blogs.law.ox.ac.uk/business-law-blog/blog/2022/02/regtech-what-it-and-why-it-matters>; Price Waterhouse Coopers, *RegTech for Financial Services* (accessed on Apr. 24, 2023), <https://www.pwc.com/us/en/industries/financial-services/regulatory-services/regtech.html>

<sup>336</sup> *See, e.g.*, Financial Industry Regulatory Authority (FINRA), *Technology Based Innovations for Regulatory Compliance (“RegTech”) in the Securities Industry*, FINRA Report (Sep. 2018), [https://www.finra.org/sites/default/files/2018\\_RegTech\\_Report.pdf](https://www.finra.org/sites/default/files/2018_RegTech_Report.pdf)

<sup>337</sup> *See* Francois-Kim Hugé, Carlo Duprel & Giulia Pescatore, *The Promise of RegTech*, INSIDE MAG. (Mar. 27, 2017), <http://www.gaco.gi/images/pdf/2017-june/lu-the-promise-regtech-27032017.pdf>

legislative inaction, RegTech presents an attractive “third way” that echoes with the existing cries for corporate social responsibility.<sup>338</sup>

The quintessential RegTech in consumer credit underwriting is “Explainability AI” (XAI)<sup>339</sup>—*i.e.*, algorithms designed to turn “black box” models into “white boxes” by providing explanations for their decision-making logics in ways that a human could understand.<sup>340</sup> Through the use of XAI, creditors could better fulfill their notice and disclosure obligations under ECOA and TILA. Since the CFPB is also currently contemplating a new rules to regulate the use of “black box” AI models in consumer credit markets, there is no better time for investment in XAI technologies.<sup>341</sup> Currently, the global XAI market size is estimated to grow from \$4.4 billion in 2021 to \$21 billion by 2030.<sup>342</sup> Today, while most XAI adoption is concentrated in the healthcare, retail, logistics, and telecom sectors, XAI use in consumer credit underwriting is one of the fastest growing areas.<sup>343</sup> From the perspective of XAI’s proponents, the credit market is already on its way to redeem itself through the rising tide of investment in XAI.

But the promise of RegTech is illusory, for two reasons: First, without changing the material conditions of exploitation that currently undergird unjust data relations, it’s doubtful whether XAI can meaningfully empower consumers against the creditors. In fact, the opposite is more likely going to be true. Currently, we are witnessing a wave of RegTech and FinTech acquisitions by some of the largest financial intermediaries. In June 2020, payments giant Mastercard acquired Finicity,

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<sup>338</sup> See, e.g., Hayden Boilini, *The Role of RegTech in the ESG Revolution*, PLANET COMPLIANCE (2022), <https://www.planetcompliance.com/the-role-of-regtech-in-the-esg-revolution/>; Vivienne Brand, *Corporate Whistleblowing, Smart Regulation, and RegTech: The Coming of the Whistlebot?*, 43 UNIV. N.S. WALES L.J. 801, 826 (2020).

<sup>339</sup> See, e.g., Matt Turek, *Explainable Artificial Intelligence (XAI)*, DEFENSE ADVANCED RESEARCH PROJECTS AGENCY (accessed Dec. 13, 2022), <https://www.darpa.mil/program/explainable-artificial-intelligence>; Laura Blattner, P-R Stark & Jann Spiess, *Machine Learning Explainability & Fairness: Insights from Consumer Lending*, FINREGLAB 23-24 (Apr. 2022).

<sup>340</sup> An algorithm is considered a “black-box” when it computes a result without giving an explanation on how it arrives at the conclusion. See *Black Box Machine Learning*, SEON (accessed Dec. 13, 2022), <https://seon.io/resources/dictionary/blackbox-machine-learning/#:~:text=In%20general%20terms%2C%20blackbox%20machine,of%20transparency%20in%20this%20technology>

<sup>341</sup> See, e.g., CFPB, *Consumer Financial Protection Bureau Strategic Plan FY 2022-2026*, at 7 (Spring 2022), [https://files.consumerfinance.gov/f/documents/cfpb\\_strategic-plan\\_fy2022-fy2026.pdf](https://files.consumerfinance.gov/f/documents/cfpb_strategic-plan_fy2022-fy2026.pdf); CFPB, *CFPB Acts to Protect the Public from Black-Box Credit Models Using Complex Algorithms* (May 26, 2022), <https://www.consumerfinance.gov/about-us/newsroom/cfpb-acts-to-protect-the-public-from-black-box-credit-models-using-complex-algorithms/>

<sup>342</sup> See generally EXPLAINABLE AI MARKET BY OFFERING, BY DEVELOPMENT, BY TECHNOLOGY, BY END-USE INDUSTRY, BY APPLICATION – GLOBAL OPPORTUNITY ANALYSIS AND INDUSTRY FORECAST, 2021-2030 (2021).

<sup>343</sup> See generally EXPLAINABLE AI MARKET SIZE, SHARE ANALYSIS 2023 TO 2027, KEY PLAYERS, COMPETITIVE WEAKNESS, AND STRENGTHS (2022).

the leading data aggregator.<sup>344</sup> Mastercard’s competitor, Visa, acquired the data aggregator Plaid.<sup>345</sup> Similarly, banks have also tried to control and internalize the process of data aggregation by pushing data aggregators to sign bilateral agreements governing their collection and transmission of consumer data from the banks’ platforms.<sup>346</sup> As of September 2020, Wells Fargo signed 17 such agreements with data aggregators, governing “99% of the information being collected from its platforms for use by other financial institutions.”<sup>347</sup> In the foreseeable future, XAI developers will likely experience the same pattern of subsumption into large financial institutions, since merger with their largest clients allows XAI developers to benefit from the economies of scale. What this means is that RegTech, like FinTech, will further empower creditors against the consumers. With XAI subsumed into the creditors’ business model, creditors will effectively gain control of the entire data production process—including data aggregation, processing, distribution, and explanation.

Second, it is unclear whether XAI can meaningfully enhance data transparency. In the scientific community, experts and researchers are divided on XAI’s ability to bring transparency to “black box” models or encourage best industry practices.<sup>348</sup> Some worry that XAI may encourage the adoption of unnecessarily complex models, provide explanations that are not faithful to what the original model computes, or lead to overly complicated decision pathways that are ripe for human error.<sup>349</sup> They are right to worry about XAI. Even though XAI can certainly reveal some hidden biases in the AI’s decision-making model, the vast majority of biases escape XAI’s detection because they are embedded in proxies that reflect systemic inequalities in the natural human environment. Recall from the example of AppleCard that AI does not need explicit gender or race inputs to discriminate or exploit.<sup>350</sup> With the widespread adoption of XAI, the most likely outcome is that creditors will factor in their investment in XAI as a cost of the lending business. Instead of using the more transparent and accountable “white box” models in the

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<sup>344</sup> See *Data Diversification in Credit Underwriting*, FINREGLAB RESEARCH BRIEF 7-8 (Oct. 2020), <https://finreglab.org/data-diversification-in-credit-underwriting>

<sup>345</sup> See *id.* at 7.

<sup>346</sup> See *id.*

<sup>347</sup> *Id.* at 8. See also Penny Crosman, *Wells Fargo Says It Has Nearly Eliminated Screen-Scraping Threat*, AMERICAN BANKER (Sep. 24, 2020), <https://www.americanbanker.com/news/wells-fargo-says-it-has-nearly-eliminated-screen-scraping-threat>

<sup>348</sup> See e.g., Agus Sudjianto & Aijun Zhang, *Designing Inherently Interpretable Machine Learning Models*, Presented at ACM ICAIF 2021 Workshop on Explainable AI in Finance (Nov. 3, 2021), <https://arxiv.org/pdf/2111.01743.pdf>; Mir Riyanul Islam, Mobyen Uddin Ahmed, Shaibal Barua & Shahina Begum, *A Systematic Review of Explainable Artificial Intelligence in Terms of Different Applications and Tasks*, 12 APPLIED SCIENCES 1353 (2022).

<sup>349</sup> See Cynthia Rudin, *Stop Explaining Black Box Machine Learning Models for High Stakes Decisions and Use Interpretable Models Instead*, 5 NAT. MACH. INTELL. 206, 207-8 (2019).

<sup>350</sup> See Talia B. Gillis, *The Input Fallacy*, 106 MINN. L. REV. 1175, 1182-83 (2022).

first place, creditors will use XAI to whitewash their existing “black box” models and continue their use. But, making a “black box” model into a “white box” through *ex post* explanation does not meaningfully prevent consumers from suffering algorithmic harms.

RegTech therefore embodies a common symptom found in most neoliberal responses to social problems: subscription to the belief that markets and technologies are dis-embedded from social relations, and that their problems can be self-contained. Proponents of RegTech have articulated a flawed vision of market internalism—*i.e.*, that all problems stemming from the market can be solved by the markets themselves.<sup>351</sup> On a technical level, the XAI movement also embraced a similarly flawed vision—*i.e.*, that all problems stemming from technology are self-contained through the development of new technologies.<sup>352</sup> But both the RegTech and the XAI movements have failed to realize that neither markets nor technologies can be dis-embedded from the social relations that constitute them. In ignoring the unjust social conditions giving rise to the problems that technologies were employed to solve, the RegTech and XAI movements have reframed the problem as outcomes of deviant individual conduct. As a result, the only viable solution they see is using technologies to discipline recalcitrant creditors, facilitate compliance, and then delegating the enforcement to the private markets. In this regard, RegTech has distracted us from the real sources of algorithmic harm—that is, unjust market relations of data production that enabled AI technologies to be used for commodification and exploitation.

## B. Alternative Pathways to Build a Just AI Credit Market

### 1. Towards Propertarian Reform: Rethinking Data Ownership

By “propertarian reform,” I do not mean to limit the discussion to private property rights. Instead, I refer to a canopy of property-related reforms that vests legal entitlement in the ownership of *things* rather than of *self*. This includes variations of common property, such as common pool governance, collective property, and joint ownership. As Salome Viljoen has pointed out, thinking of data governance only in narrow dichotomous terms—*i.e.*, “individual property rights” versus “individual dignity protections”—constrains our imagination of what is

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<sup>351</sup> See Jimmy Wu, *Optimize What?*, COMMUNE (Mar. 15, 2019) (emphasis added) (“Techno-solutionism is the *very soul of the neoliberal policy designer*, fetishistically dedicated to the craft of incentive alignment and (when necessary) benevolent regulation. Such a standpoint is effective outcome of the contemporary computational culture and its formulation as curriculum.”)

<sup>352</sup> See Ben Green & Salomé Viljoen, *Algorithmic Realism: Expanding the Boundaries of Algorithmic Thought*, FAT/ML ’20 CONFERENCE PAPER 1, 5 (Jan. 27, 2020).

possible.<sup>353</sup> The move to understand data in *relational* terms rejects that individualist solutions are the only possibility for meaningful reform.

This article imagines collective data ownership as an alternative pathway to data governance. While individual data ownership helps rearrange unjust social relations of data production, circulation, and retainment within vertical systems of informational control, collective data ownership addresses horizontal relations.<sup>354</sup> It also rebalances the power disparities between the owners/users of AI (creditors) and the subjects of AI (consumers) on both vertical and horizontal dimensions.<sup>355</sup> Since data is the most valuable and vital input for AI systems, changing the legal foundations of data ownership will impact the occurrence of algorithmic informational and decisional harms.

In the context of consumer credit, granting consumers some form of property entitlement to the data can radically reshape existing relations of data aggregation and reorient the direction of power along the chains of data supply. For instance, if consumers are granted *full* property ownership over the data generated through their online activities—including the rights to exclude, use, enjoy, dispose, and sell<sup>356</sup>—then the data aggregators and brokers will need to purchase from consumers a right to access consumer data to conduct their business. Admittedly, *full* data ownership may have chilling effects on the speed and efficiency of data circulation since it breaks down existing economies of scale already formed between data aggregators and creditors. But *full* data ownership can also redirect power from creditors to consumers by incentivizing the market to invest in consumer-empowering FinTech and push data aggregators to disentangle with creditors. Even from a dignitarian standpoint, granting consumers a right to exclude others from accessing the data—anchored in the notion of personal dominion and sovereignty over things—can prevent the erosion of privacy and autonomy.<sup>357</sup> A propertarian data governance

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<sup>353</sup> See Viljoen, *supra* note 37, at 628.

<sup>354</sup> See generally Peter Leonard, *Beyond Data Privacy: Data “Ownership” and Regulation of Data-Driven Business*, AM. BAR ASS’N J. (Jan. 17, 2020).

<sup>355</sup> Some progressive politicians who were concerned over inequality in the informational economy have also advanced proposals envisioning some sort of democratic data ownership. See *Data as a Property Right*, YANG 2020 (2020) <https://2020.yang2020.com/policies/data-property-right/>

<sup>356</sup> See generally Jesse Wall, *Taking the Bundle of Rights Seriously*, 50 VICTORIA UNIV. WELLINGTON L. REV. 733 (2019). Cf. Henry E. Smith, *Property Is Not Just a Bundle of Rights*, 8 ECON. J. WATCH 279, 291 (2011).

<sup>357</sup> Property is no longer exclusively viewed through the Blackstonian concept of “sole and despotic dominion which one man claims and exercises over the external things of the world.” WILLIAM BLACKSTONE, COMMENTARIES ON THE LAWS OF ENGLAND, BOOK II. OF THE RIGHTS OF THINGS (accessed Apr. 25, 2023), [https://avalon.law.yale.edu/18th\\_century/blackstone\\_bk2ch1.asp](https://avalon.law.yale.edu/18th_century/blackstone_bk2ch1.asp). But the right to exclude remains anchored in the dignitarian concept of personal sovereignty (a weakened form of absolute dominion). See Thomas W. Merrill, *Property and Sovereignty, Information and Audience*, 18 THEOR. INQ. L. 417, 445 (2017). The Supreme Court have consistently treated the right to exclude is the hallmark of property ownership. See, e.g., *Andrus v. Allard*, 444 U.S. 51 (1979)

reform that entirely transforms the material underpinnings of data production can protect consumer autonomy better than any neoliberal regulation could.

Alternatively, formalizing a *partial* property ownership of data can also reshape data relations, albeit with less radical restructuring effects on the credit market. For example, conceptualizing data ownership as an asset or an entitlement to income can reduce the consumers’ chronic dependence on unjust data relations to access the means of basic economic subsistence. Under an income-entitlement regime, data aggregators may not need explicit consumer consent to harvest data and sell them to creditors. But consumers will be entitled to a “data dividend” for the wealth generated from data usage.<sup>358</sup> While this approach to propertarian data governance might not break up existing bonds between data aggregators and creditors, it can certainly provide a wealth cushion that help alleviate the burdens of the low-income and reduce credit inequality.<sup>359</sup>

In contrast to an individualist or dignitarian approach, a propertarian approach to data governance reform can help us remediate unjust relations of data production and circulation—the root causes of algorithmic harm. Whether in *full* or *partial* form, formalizing a property right to data can provide consumers a means to regain control over the processes and fruits of AI’s atomization of consumer *selfhood*. However, to say that we should embrace a propertarian reform does not suggest that dignitarian interests in data are unimportant, or that individual rights do not matter. Individual autonomy, dignity, and integrity do matter—and, as Parts I and II of this article have illustrated, they are embedded in the purpose of equal credit access protection. But propertarian approaches can protect these interests as well. A propertarian reform can also address systemic inequalities that have been ignored by dignitarian approaches for far too long.

## 2. Recommendations for Reshaping Unjust Data Relations

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(holding that an interference with the right to exclude constitutes a “taking” that requires just compensation under the 5<sup>th</sup> Amendment); *Kaiser Aetna v. United States*, 444 U.S. 164 (1979) (stating the right to exclude is the most important stick in the bundle of property rights); *Pruneyard Shopping Center v. Robins*, 447 U.S. 74 (1980) (“[O]ne of the essential sticks in the bundle of property is the right to exclude.”).

<sup>358</sup> Former Presidential Candidate Andrew Yang has launched the Data Dividend Project to push companies like Meta and Google to pay users a “data dividend” for the wealth that these companies have generated through the commercialization of user data. See DATA DIVIDEND PROJECT (accessed Apr. 25, 2023), <https://www.datadividendproject.com/>

<sup>359</sup> House Representative Alexandria Ocasio-Cortez has also posited data ownership as a potential solution to wealth inequality. In a Tweet, she stated: “[T]he reason many tech platforms have created billionaires is [because] they track you without your knowledge, amass your personal data [and] sell it without your express consent. You don’t own your data, [and] you should.” See Alexandria Ocasio-Cortez (@AOC), TWITTER (Feb. 19, 2020, 11:43 PM), <https://twitter.com/AOC/status/1230352135335940096>

Of course, no legal reform is ever perfect—not even a radical restructuring of the market through consumer data ownership. While a propertarian framework for data governance can help us directly address the root causes of algorithmic harm in ways that no individualist or dignitarian regime can, it is important to recognize there is no silver bullet to our present problems.<sup>360</sup> Ultimately, whether or not we should opt for *full* or *partial* data ownership (and, in the event we opt for partial ownership, which stick within the bundle of rights to prioritize) is a trade-off between social priorities—a choice between the thoroughness and administrability of legal reform. That trade-off should be a subject of democratic, public, and open deliberation—a choice that I am too hesitant and unqualified to make. Nevertheless, there are concrete steps we can take to remove distractions obstructing our clear view of what is possible. The following paragraphs illuminate what a thorough propertarian reform to reshape unjust market relationship will likely require.

(a) *Reimagining the Nature of Data Ownership*

Any propertarian reform must first address a threshold question: what does it mean to say someone owns data?<sup>361</sup> Currently, several analogies are being deployed to make sense of data ownership: data as *oil*, as *personhood*, as *salvage*, and as *labor*.<sup>362</sup> Each time a “data-as” analogy is proposed, the proponent is suggesting that data should be regulated the same way the other thing is currently governed. The logic of each “data-as” analogy is as follows: First, it makes an analytical claim about what makes data valuable. Second, by identifying what makes them valuable, the analogy makes a normative judgment about who should own the data. Third, to implement the normative ideal, the analogy makes a legal claim about what rights,

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<sup>360</sup> There are still several reasons to be skeptical of propertarian data governance reforms. The first one is administrability. Operationalizing a reform at this scale may need significant political mobilization and legislative support. The second is incentive. Making data into personal property or some kind of income-generating asset may further incentivize consumers to share data about themselves online and sell them to data aggregators. See Viljoen, *supra* note 37, at 621-23.

<sup>361</sup> Although the concept of “data” is already defined under existing data-governance laws, it does not preclude legal arguments to analogize data to other objects of ownership because these laws have broad definitions of data. For example, under GDPR, personal data is defined as “any information relating to an identified or identifiable natural person (“data subject”); and identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural, or social identity of that natural person.” GDPR § 4(1).

<sup>362</sup> See Mathias Risse, *Data as Collectively Generated Patterns: Making Sense of Data Ownership*, CARR CTR FOR HUM. RIGHTS POL’Y, HARV. KENNEDY SCH. DISCUSSION PAPER 1, 4 (Spring 2021), [https://carrcenter.hks.harvard.edu/files/cchr/files/210426-data\\_ownership.pdf](https://carrcenter.hks.harvard.edu/files/cchr/files/210426-data_ownership.pdf).

duties, and powers should be established to buttress its particular vision of data ownership.<sup>363</sup>

(i) *Data Is Not Oil*: The most common legal analogy is that data is *just like* oil, or any depletable natural resources. This concept is popularized by British mathematician Clive Humby, who declared in 2006 that “data is the new oil.”<sup>364</sup> What Humby meant is that data, like oil, is valueless and useless in its raw state; to generate value, data needs to be refined, processed, and turned into something else—the value of data lies in its potential.<sup>365</sup> But “data-as-oil” fails as a legal analogy. Unlike oil, data can be infinitely supplied by its producers. It is continually updated by the consumer’s daily engagement with the credit system, whether directly (*e.g.*, applying for loans) or indirectly (*e.g.*, supplying credit information). In that sense, data is not like oil—oil is relatively scarce, fungible, and rivalrous in consumption; whereas data is abundant, non-fungible, and non-rivalrous.<sup>366</sup> This challenges a central claim that many businesses have articulated in their legal battles to claim ownership of consumer data: that data is merely raw material floating freely in the natural domain readily available for economic appropriation.<sup>367</sup>

(ii) *Data Is Not Personhood*: A competing analogy, anchored in dignitarian concepts of personal sovereignty, sees data as imprints of human expression in the cyberspace. Whereas “data-as-oil” views data as extracted from the natural domain, “data-as-personhood” views data as emanated from human subjectivity. Under this theory, data is an extension of the *self*, an aspect of individual integrity and autonomy that is immune from appropriation (or expropriation). This analogy encourages us to think of data as not being owned at all. It urges legislators and policymakers to completely de-commodify access to data and make it unavailable for all market actors. But this legal analogy is flawed for two reasons. First, the analogy conflates the purpose and outcome of individual expression. While it’s true that people express their personal desires, anxieties, thoughts, and lived experiences through communications in the digital medium, data is merely a *byproduct* of that expression. People do not engage with the cyberspace for the purpose of producing data. Second, the analogy fails to recognize that people have more than a dignitarian interest in data. However uncomfortable it may be, data does have commercial value. If given the opportunity, many would trade their dignitarian interests for

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<sup>363</sup> See *id.* at 1-2.

<sup>364</sup> See, *e.g.*, John Suarez-Davis, *Data Isn’t “the New Oil”—It’s Way More Valuable Than That*, THE DRUM (Dec. 12, 2022); Nisha Talagala, *Data as the New Oil Is Not Enough: Four Principles for Avoiding Data Fires*, FORBES (Mar. 2, 2022).

<sup>365</sup> When we speak of data being “mined,” we are implicitly subscribing to the idea that data can be extracted from the natural state, the same way coal is being mined.

<sup>366</sup> See Lauren Henry Scholz, *Big Data is Not Big Oil: The Role of Analogy in the Law of New Technologies*, 86 TENN. L. REV. 863, 878-84 (2019).

<sup>367</sup> See *supra* Part II.A.3.



material benefit. Thus, the more sensible approach is to accommodate both dignitarian and propertarian interests by having consumers retain a portion of the wealth that is created through the commercialization of data.

(iii) *Data Is Not Salvage*: “Salvage” is defined as “a rescue of endangered property.”<sup>368</sup> In maritime law, “salvage award” is a compensation for people who have rescued property that is lost at sea.<sup>369</sup> In finance, “salvage value” describes the remaining value that someone should receive after disposing an asset that has exhausted its useful life.<sup>370</sup> What is common in both is the idea that whoever rescues an imperiled property from waste should be entitled to the value of the labor they have invested to save a property that would have perished but for the labor. In data governance, the analogy of “data-as-salvage” echoes with the sentiment that data miners and processors should be compensated for turning data into marketable outputs. However, this analogy is also flawed because it fails to recognize that data is collectively generated. There’s no doubt that data miners and processors have “mixed their labor” in generating marketable data.<sup>371</sup> But to say that data miners “saved” data from an “imperiled state” and turned them into something useful is to grossly overstate their contribution to data production. Let us not forget that each cog in the chain of data production—consumers, data aggregators, miners, distributors, and financial intermediaries—have materially contributed to the process. Remove any single actor from the chain, data would not be marketable.

(iv) *Data Is Not Labor*: Among the pantheon of analogies, the “data-as-labor” analogy is the most promising. At its core, this analogy aims to distribute the fruits of data production according to the proportion of labor invested by each actor on the data production chain. Under this framework, consumers, data miners, and aggregators will each be entitled to compensation for the “wage labor” they invested in producing the data. This analogy strikes a balance between protecting both dignitarian and propertarian interests in data. It recognizes that, while people do express personhood value in the production of data, they will readily trade it for material benefit when given the opportunity. The “data-as-labor” analogy has also garnered much academic support. Glen Weyl and Eric Posner have introduced a proposal called Radical Markets, which “seeks to introduce a labor market for

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<sup>368</sup> *Salvage*, CORNELL L. SCH. LEGAL INFO. INST. (last updated Jul. 2021), <https://www.law.cornell.edu/wex/salvage>

<sup>369</sup> See Joshua C. Teitelbaum, *Inside the Blackwall Box: Explaining U.S. Marine Salvage Awards*, 22 SUP. CT. ECON. REV. 55, 56 (2014).

<sup>370</sup> See Will Kenton, *Salvage Value Meaning and Example*, INVESTOPEDIA (updated Apr. 17, 2023).

<sup>371</sup> The phrase “mixes one’s labor” refers to Locke’s comment about the nature of property ownership: “[Whoever] mix[es] his *Labour* with, and joyned to it something that is his own [...] thereby makes it his *Property*.” JOHN LOCKE, SECOND TREATISE OF GOVERNMENT § 27, at 287 (emphasis in original). See also Adam Mossoff, *Locke’s Labor Lost*, 9 U. CHI. L. SCH. ROUNDTABLE 155, 156 (2002) (discussing contemporary critiques of Locke’s labor theory of property).

data.”<sup>372</sup> In doing so, they aim to uproot the unjust foundations of data production, upon which the uncompensated fruits of “data laborers” are “distributed to a small number of wealthy savants rather than to the masses.”<sup>373</sup> But there are still reasons to be skeptical of this analogy. First, if wage labor is equivalent to the value that each actor has invested in the production of data, then the distribution of wealth will be inherently unequal. Producers located on the lower-end of data value chain (*i.e.*, consumers responsible for data provision) will get minimally compensated, while producers located on the higher-end of the chain (*i.e.*, data processors responsible for data repackaging and refinement) will retain most of the economic surplus. Second, “data-as-labor” does not account for market externalities. Crucially, markets and market prices are not neutral conduits for inherent value. While the market may be able to account for individualized value within the vertical relations of data production, it cannot account for the aggregate costs imposed on horizontal flows of data. Its key omission is assuming that markets are dis-embedded.

(b) *Creating a Collective Property Right in Data*

If data is not oil, personhood, salvage, or labor, then what is it? Mattias Risse conceptualizes data as *collectively generated patterns*.<sup>374</sup> The idea is that the value of data “does not consist in individual items but in the emerging patterns.”<sup>375</sup> Data is valuable not only for those who provide data within the vertical relations of data production, but also for people situated in horizontal relations of data flow, circulation, and distribution.<sup>376</sup>

The proposal that data consists of *collectively generated patterns* differs from other “data-as” proposals in that it is not a an ontological claim about what data is or ought to be.<sup>377</sup> It is a purely descriptive and pragmatic claim about how data currently fits into the existing “human practices of assigning commercial value to entities.”<sup>378</sup> From descriptive lens, data is a microcosm of vast social networks that are continually adapted, updated, and reflected by those who generate, use, and

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<sup>372</sup> Viljoen, *supra* note 37, at 617-18 (referring to ERIC A. POSNER & E. GLEN WEYL, RADICAL MARKETS: UPROOTING CAPITALISM AND DEMOCRACY FOR A JUST SOCIETY 209, 222 (2018)). *See also* Imanol Arrieta Ibarra, Len Goff, Diego Jiménez Hernández, Jaron Lanier & E. Glen Weyl, *Should We Treat Data as Labor? Let’s Open Up the Discussion*, BROOKINGS INST. (Feb. 21, 2018), <https://www.brookings.edu/blog/techtank/2018/02/21/should-we-treat-data-as-labor-lets-open-up-the-discussion/>

<sup>373</sup> POSNER & WEYL, *supra* note 372, at 231, 209.

<sup>374</sup> *See* Risse, *supra* note 362, at 6.

<sup>375</sup> *Id.*

<sup>376</sup> *See id.*

<sup>377</sup> *See id.* at 9.

<sup>378</sup> *Id.*

consume data for economic means.<sup>379</sup> Thinking of data in *relational* rather than *ontological* terms helps us detect the blind spots of each aforementioned analogy.

From a legal standpoint, understanding data as *collectively generated patterns* opens up new possibilities for restructuring the currently unjust data relations. If we accept the fluidity and amorphousness of data, then we can design a legal system that directly protects the data subjects' (consumers and platform users) access and engagement with other sources of data production. Thinking of data in fluid terms thus enables us to formulate a *collective property right in data* deriving from the management of social relations. For instance, we can imagine a membership-based joint tenancy or co-ownership of data that places the onus of data management on the community. Another possibility is to grant consumers a right to access, control, and withdraw personal data from the digital commons, without granting a right to exclude. These propertarian reforms do not require analogizing data to already-existing things. Instead, it allows us to accept data as it is—that data is *sui generis*.

Here, it is important to note that collective property rights in data does not repudiate the notion that individuals have important dignitarian interests in data. But it does repudiate the idea that individual dignitarian interests in data are the only interests that matter to data governance law, and the notion that any interest in data is reducible to individual dignitarian interests. The fetishization of individualism, autonomy, and dignity is part and parcel of neoliberalism's effort to reduce complex social problems into outcomes of individual choice, and to legitimize a systematic program of governmental retreat and divestment from public goods provision through the ideal of free market. By liberating ourselves from the intellectual constraints of neoliberalism, we can see new propertarian reforms for data governance and directly address the root causes of algorithmic harm.

### (c) *Building an Open Digital Commons*

Once we recognize a collective property right in data, the next step is to consider what data infrastructures we can build to make these rights meaningfully enforceable. Having a digital commons is the foundation for any meaningful exercise of non-exclusive right to access, use, and withdraw data. Thus, our task here is to ensure that the digital commons remains *open* and *common*—meaning

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<sup>379</sup> *See id.*

that it will neither regress into “tragedies of the commons”<sup>380</sup> or evolve into “tragedies of the anti-commons.”<sup>381</sup>

(i) *The Public Data Trust Option*: To preserve the openness and commonality of the digital economy, it is necessary for us to resist and reverse the privatization of consumer data by creditors. One possibility is to develop an open database like the Human Genome Project.<sup>382</sup> Another is to establish a national data trust for the public good, under the supervision of an independent public-data management authority.<sup>383</sup> We can also draw inspiration from other countries. The UK and Canada explored national data trusts as a means to govern citizen data and regulate their access by businesses corporations.<sup>384</sup> A public data trust would allow individuals, communities, and organizations to grant the rights of control and access their data to entrusted entities to manage their data for their benefit.<sup>385</sup> This would turn data intermediaries into data fiduciaries—meaning that they would be subject to the heightened duties of data stewardship.

(ii) *The Public Utilities Option*: An alternative solution is to build on existing informational infrastructures of credit data collection and distribution. Three of the largest National Credit Reporting Agencies (NCRAs)—Equifax, TransUnion, and Experian—have already amassed vast volumes of consumer data for credit reporting.<sup>386</sup> NCRAs have also developed extensive networks of data supply

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<sup>380</sup> See, e.g., ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION 2-4, 8-10, 12-16, 18-21 (1990); see also Elinor Ostrom & Vincent Ostrom, *A Theory for Institutional Analysis of Common Pool Problems*, in MANAGING THE COMMONS 157-72 (Garret Hardin & John Baden eds., 1977).

<sup>381</sup> See Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621, 639 (1998).

<sup>382</sup> *The Human Genome Project*, NAT’L HUMAN GENOME RES. INST. (accessed Apr. 25, 2023), <https://www.genome.gov/human-genome-project>

<sup>383</sup> See Viljoen, *supra* note 37, at 645.

<sup>384</sup> See, e.g., Dame Wendy Hall & Jérôme Pesenti, *Growing the Artificial Intelligence Industry in the UK*, GOV.UK (Oct. 15, 2017), [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/652097/Growing\\_the\\_artificial\\_intelligence\\_industry\\_in\\_the\\_UK.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/652097/Growing_the_artificial_intelligence_industry_in_the_UK.pdf); *Ontario Launches Consultations to Strengthen Privacy Protections of Personal Data*, ONTARIO (Aug. 13, 2020), <https://news.ontario.ca/en/release/57985/ontario-launches-consultations-to-strengthen-privacy-protections-of-personal-data>; *Data Trusts: Lessons from Three Pilots*, OPEN DATA INST. (Apr. 15, 2019), <https://www.theodi.org/article/odi-data-trusts-report/>

<sup>385</sup> See Peter Wells, *UK’s First Data Trusts to Tackle Illegal Wildlife Trade and Food Waste*, OPEN DATA INST. (Jan. 31, 2019), <https://www.theodi.org/article/uks-first-data-trusts-to-tackle-illegal-wildlife-trade-and-food-waste/>

<sup>386</sup> See CFPB, *List of Consumer Reporting Companies*, CFPB CONSUMER EDUCATION (accessed Apr. 30, 2023), <https://www.consumerfinance.gov/consumer-tools/credit-reports-and-scores/consumer-reporting-companies/companies-list/#:~:text=There%20are%20three%20big%20nationwide,and%20other%20inquiries%20and%20information.>

through business partnerships with FinTech companies and data aggregators.<sup>387</sup> One possibility to create a collective proprietarian data infrastructure is regulate NCRA as public utilities—the same way that natural gas, electric power, cable, telecommunications, and water companies are governed.<sup>388</sup> In the common law tradition, courts have developed the public utility doctrine to ensure that industries providing goods and services essential to the public offer them “under rates and practices that [are] just, reasonable, and non-discriminatory.”<sup>389</sup> Industries that qualify as public utilities typically meet two conditions: they are considered “natural monopolies”<sup>390</sup> and are “affected with public interest.”<sup>391</sup> Today, NCRA and other credit data platforms have already satisfied the two conditions that historically triggered a public utility recognition. As public utilities, they will have affirmative obligations to the public to provide open data access, non-discrimination, and universal service. This “ensure[s] collective, social control over vital private industries that provided foundational goods and services on which the rest of the society depends.”<sup>392</sup>

(iii) *Collective Social Governance of Data*: Whether we select the public trust or the public utilities option, governing data as open commons invites an additional challenge: how do we ensure data is made as openly accessible as possible, while still limiting access to data with the potential to do harm? Admittedly, not all data are appropriate for open public access.<sup>393</sup> Restriction is warranted for data that contain sensitive personal information or otherwise carry potential for intentional or accidental misuse.<sup>394</sup> Leakage of certain data can also pose security risks.<sup>395</sup>

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<sup>387</sup> See, e.g., *Credit Score Consolidation With Equifax Data*, DEMYST (accessed Apr. 30, 2023), <https://demyst.com/external-data/use-case/credit-score-consolidation/equifax>; *Utilizing Financial Transaction Data to Enhance Lending*, EXPERIAN (accessed Apr. 30, 2023), <https://www.experian.com/consumer-information/account-aggregation-solutions>

<sup>388</sup> See, e.g., Jennifer Shakabatur, *The Global Commons of Data*, 22 STAN. TECH. L. REV. 354, 399-402 (2019); Max Edelman, *We Need to Regulate Big Data as a Public Utility*, COLUM. POLIT. REV. (Jul. 3, 2022) (referring to Shakabatur, *The Global Commons of Data*).

<sup>389</sup> Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1331 (1998).

<sup>390</sup> See generally JAMES C. BONBRIGHT, ALBERT L. DANIELSEN & DAVID KAMERSCHEN, PRINCIPLES OF PUBLIC UTILITY RATES (1988).

<sup>391</sup> *Munn v. Illinois*, 94 U.S. 113, 130 (1877). See generally CHARLES F. PHILLIPS JR., THE REGULATION OF PUBLIC UTILITIES (1993).

<sup>392</sup> Shakabatur, *supra* note 388, at 400.

<sup>393</sup> See Digital Public Goods Alliance, Global Partnership for Sustainable Development Data, Jain Family Institute, UN Global Pulse & UNICEF, *Exploring Data as and in Service of the Public Good* 5 (2023), <https://digitalpublicgoods.net/PublicGoodDataReport.pdf>

<sup>394</sup> See *id.* at 8.

<sup>395</sup> According to Privacy Rights Clearinghouse, 20,030 data breaches have been reported from 2005 to 2022, exposing billions of records with personal identifiable information to potential abuse. See *Data Breach Chronology*, PRIVACY RIGHTS.ORG (last accessed on May 8, 2023), <https://privacyrights.org/data-breaches>

Establishing a legal infrastructure for the collective social governance of data can remediate unjust data relations without compromising people’s privacy and security interests in data. One way to achieve this is to simultaneously vest the power of data management in the hands of consumer communities, while granting data access to an independent, entrusted entity acting under public interest.<sup>396</sup> Currently, the EU has considered a similar proposal that would allow public authorities to access data where doing so is “in the general interest and would considerably improve the functioning of the public sector.”<sup>397</sup> This proposal follows the logic of the 2016 French Digital Act.<sup>398</sup> In the U.S., statistical agencies, census bureaus, and the Library of Congress have also established professional expertise in managing data for the public good while adhering to strict public-purpose limitations and high confidentiality standards.<sup>399</sup> These existing forms of public data management systems can serve as a model for collective social data governance.

## CONCLUSION

Over the past half century, neoliberalism has entrenched a regulatory paradigm that saw social problems as outcomes of individual choice. This paradigm, forged by the confluence of neoclassical laissez-faire economic thought and a formalist understanding of civil rights, saw *free market* and *consumer autonomy* as the ultimate embodiment of emancipation and the panacea to all injustices in a market society. The twin pillars of neoliberalism also find ubiquitous presence in our laws governing the supply and distribution of credit. However, as this article has tried to illustrate, *free market* and *consumer autonomy* are only figments of pipedream. Instead of providing meaningful credit access and equality, these ideals have distracted us from the root problems: unjust market relations stemming from systemic and inherited social inequalities.

If the failures of *free market* and *consumer autonomy* ideals were once hidden, then the ascendancy of AI made them apparent. AI situates the vast majority of consumers within systems of informational control where market price-signals are engineered and consent is manufactured. Within these digital environments, consumer data are ceaselessly harvested, extracted, refined, and repackaged into marketable products. This also causes the unprecedented commodification of

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<sup>396</sup> See Shakabatur, *supra* note 388, at 390-95.

<sup>397</sup> European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Building a European Data Economy* § 3.5, COM (2017) 9 final (Jan. 16, 2017).

<sup>398</sup> See generally EUR. STATISTICAL SYS., DATA ACCESS FOR OFFICIAL STATISTICS (2017).

<sup>399</sup> See Eun Seo Jo & Timnit Gebru, *Lessons from Archives: Strategies for Collecting Sociocultural Data in Machine Learning*, FAIRNESS, ACCOUNTABILITY & TRANSPARENCY (Jan. 2020).

consumer selfhood and the exploitation of consumers through microtargeting and price discrimination. Yet, existing proposals for AI governance, informed by neoliberalism, have continued to cast these problems as outcomes of imperfect markets and individual choice. They obscure us from seeing the true source of algorithmic harm. The root problem of AI exploitation and commodification is not AI technology itself. Rather, it lies in the unjust market relations of data production, circulation, and control that entrench and reproduce systemic inequalities.

Moving beyond neoliberalism, recognizing algorithmic harm as both individually and socially constituted can help us imagine new possibilities to the address the root causes of systemic credit inequality. A purely dignitarian reform of data governance which addresses only individual harm is bound to be incomplete. To fundamentally reshape the unjust social relations that currently underpin AI exploitation and build a just credit market, we need to push for a propertarian reform. To strive for this possibility, we must radically reimagine the nature of data ownership as relational and fluid, build a legal infrastructure for collective property rights in data, and construct an alternative system to govern data as open commons.