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Private Interests, Public Law, and Reconfigured Inequality in Modern Payment Card Networks

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ARTICLES

Private Interests, Public Law, and Reconfigured Inequality in Modern Payment Card Networks

Stephen Wilks*

ABSTRACT

This Article examines two phenomena contributing to the racial stratification of consumers in credit card markets. The first phenomenon pertains to the longstanding conflict between card issuers and merchants over payment processing cost allocation. If successful, First Amendment challenges to existing statutory surcharge bans will allow merchants to impose an additional fee when consumers use credit cards as a form of payment. The Article relies on the interplay between socioeconomic class and behavioral theory to suggest subsistence borrowers would be more likely to pay surcharge fees than wealthier consumers. This arrangement disfavors the poor to support a hierarchy of borrowers, to the extent that income inequality continues to cleave along racial lines. The second phenomenon concerns algorithmic lending practices. Algorithmic lending practices use technology to effectively extend structural racism's cumulative effects into the underwriting process. This Article argues that the al-

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gorithmic lending in modern credit card enrollment practices supports new and complex iterations of racial bias. Structural racism's legacy married to modern data mining practices capture and compare the broad sweep of spending patterns among consumers with racially disparate spending power. Public law's relationship to each of these two phenomena illustrates the government's limited capacity to protect marginalized consumers from the racialized effects of cardholder stratification. The Article concludes by encouraging experts to refine underwriting practices to disentangle racism's moral hazards from the legitimate business practice of equitable underwriting that determines a prospective borrower's creditworthiness.

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INTRODUCTION

In March 2017, the United States Supreme Court held that a New York statute prohibiting merchants from imposing credit card surcharges regulated communication and therefore implicated free speech.¹ The Court stopped short of striking down the legislation and remanded the case back to the Second Circuit. Appellate treatment of similar challenges originating in Texas, Florida, and California, however, suggest that the courts will soon strike down these statutes for violating the First Amendment.

The circuit court rulings and Supreme Court remand are the latest development in an industry where two discrete forces will likely shape cardholder segmentation in the future. The rulings will likely reinforce economic arrangements that favor top-tier “lifestyle” borrowers to the detriment of poorer cardholders who are more likely to be “subsistence” borrowers.

The first development shaping cardholder segmentation originates from surcharges. Surcharges are fees merchants impose when consumers use credit cards as forms of payment. This Article posits that surcharges will dissuade card usage among affluent consumers while exploiting vulnerable subsistence borrowers. Surcharges exploit subsistence borrowers because such cardholders are more likely to generate revenue for lenders through interest on unpaid balances and penalties. Recent appellate jurisprudence suggests statutory surcharge bans are not likely to survive First Amendment challenges. Such challenges are a new phase in the decades-long contest over fees charged to process credit card payments. Much of the dispute about credit card payment fees turns on the ratio of payment fees to infrastructure costs related to capturing cashless payments. The dispute further turns on the degree to which merchants benefit from payment card associations that work through constituent financial associations. The benefit occurs when the constituent financial institution underwrites credit card issuance used to support consumer spending. The dispute about how and which payments go to whom and when is coming to a head in the application of First Amendment jurisprudence to surcharge fees.

Increased credit and debit card use—which now exceeds cash, checks, and other payment methods—sharpens commercial interest in various differential pricing strategies. Differential pricing refers to the practice of selling the same product to different customers at different prices. Differential pricing strategies have been subject to

1. *Expressions Hair Design v. Schneiderman*, 137 S. Ct. 1144, 1151 (2017).

complex legal and economic restraints. Most of us can discern how and why differential pricing psychologically steers a consumer's choice of payment. We give less thought, however, to the ways in which such choices foreclose access to protections afforded by federal law, or to the myriad benefits associated with maintaining active credit relationships. When we infuse the implications of differential pricing schemes with concern for the experience of racial minorities, the discussion becomes more complex. Pre-existing forms of racism already extant within debtor-creditor relationships overlap with payment choice determinants. The intersection of payment choice determinants and racism embedded in the borrowing system adds distinct racialized implications to differential pricing schemes.

How the legal system treats payment choices and systems has dramatic impacts on our society. Payment choice matters because it animates our economic participation in society and supports movement through the financial system. Payment choice serves as the vehicle that private individuals and commercial actors use to pursue their aspirations, meet basic needs, and establish relationships in every interaction requiring tender of payment. Further, payment choice matters because a study of payment choice reveals practices that amplify inequities experienced by racial and other minorities. First Amendment protections for differential pricing regimes merely shift control over the mechanisms that shape consumer behavior. First Amendment litigation posture signals a potential collision of constitutionally protected commercial speech with federal consumer protections for credit card users. Additionally, First Amendment protection poses an ethical dilemma for many socially conscious consumers. Socially conscious consumers often understand that card-user segmentation inevitably involves conferral of benefits to some at the expense of others. Finally, First Amendment protection for differential pricing regimes may enable merchants to reinforce the marginalization of unbanked and underbanked populations—a constituency whose ranks are predominantly poor and people of color.

The second major industry development revolves around issuer dependency on algorithms in marketing and enrollment practices. This Article explores how algorithmic lending practices operate to include class and race in determinations of creditworthiness. Fair lending laws cannot easily reach racially problematic lending arrangements when obscured by algorithms. A critique of fair lending laws must also consider whether it is possible to disentangle

high-risk borrower identification, which is a legitimate business practice, from implicit bias and other moral hazards.

Payment environments are networked ecologies in which participant behavior shapes the relationships that actors have with each other, while influencing the payment system architecture as a whole. The granular details of participant behavior belie important revelations about the modern marketplace for financial services, which can be a cruel place for those who are unwittingly complicit in undermining their own interests. Scholars have historically used structural racism and its effects to explain how credit card industry practices produce racially problematic outcomes. This Article seeks to carve out room to adopt new and complementary analytical approaches better suited to capturing the modern marketplace's racially problematic effects.

Often institutional in form and function, structural racism is a system of policies, practices, cultural representations, and other norms that work to initiate, perpetuate, or reinforce racial group inequities. Structural racism's intentional and implicit biases animate and preserve features of socioeconomic stratification and disproportionately impact people of color. These biases reinforce the notion that people of color's standing in society can be diminished and misattributed to their race in isolation of more relevant discriminatory antecedents. The historical arc of racism's legacy connects widely known historical wrongs to the demographic markers shaping contemporary access to credit—namely, education, employment, and earning power.

Although helpful, the structural approach's underlying rubric is not sufficiently equipped to discuss the card industry's racially harmful practices. These practices marry two discrete informational realities. The first reality pertains to traditional demographic indices like zip codes. Traditional demographic indices commonly serve as resultant proxies for race because they flow from access to education, income, employment, and the long-term legacy of redlining and restrictive covenants. The second, and equally insidious, set of norms takes root in actuarial science, algorithms, and "Big Data." These mathematical informational norms complement traditional markers by pairing traditional markers with powerful tools designed to target consumers and prey on their economic anxieties. The tools employ behavioral psychology as part of an effort to promote card usage. The coupling of the traditional and the technological offers the potential to germinate a new, participatory, and atomized species of racism. Facially neutral technologies (1) obscure modern iterations of racial bias, and (2) encourage us to

unwittingly enable problematic business processes whenever we opt to pay with cards that feed data-driven expressions of racial harm.

Two features of the credit card industry lend themselves to a conceptualization of race that is more atomized than structural. The first feature is statutory in nature. In 1974, Congress enacted the Equal Credit Opportunity Act (ECOA),² which was the first major statutory attempt to regulate determinations of creditworthiness. ECOA sought to regulate determinations of creditworthiness through forbidding discrimination on the basis of sex and marital status.³ Congress amended the statute in 1976, adding age, religion, race, color, and national origin as protected classes.⁴ Although ECOA is the primary federal statute barring racial discrimination in the credit card industry, card issuers are not mandated to capture and report data on the role race plays in marketing, enrollment, and underwriting. The gap in card-issuer-discrimination regulation differs from other similar anti-discrimination financial statutes, such as the statutes that govern anti-discrimination in the mortgage industry. The anti-discrimination obligation of residential mortgage lenders, for example, has been to report on the race of applicants and borrowers since 1989.⁵

The lack of reporting obligations is ironic partially because the credit card industry is so deeply embedded in the exploitation of old and new forms of racially problematic data gathering. Yet, there may be a functional explanation. Consumers buy homes less frequently than they use credit cards. The frequency of small credit card purchases makes card use a more transaction-intensive form of borrowing compared to home loans, which support homeownership and community development. Regulating the latter form of loan is tightly intertwined with policy goals that combat the lasting effects of redlining and other intentionally racist processes. The relatively small number of mortgage transactions combined with their qualitatively distinct features therefore lends themselves to existing race-conscious reporting requirements.

2. Equal Credit Opportunity Act, 15 U.S.C. §§ 1691–1691f (2018).

3. *See id.* §§ 1521–1522.

4. *See* Home Mortgage Disclosure Act of 1975, 12 U.S.C. §§ 2801–2811 (2018). The Home Mortgage Disclosure Act's underlying policy rationale was to mandate disclosure of lending practices in urban areas. Since its enactment in 1975, subsequent amendments have expanded the scope of these reporting requirements to include race, gender, and income of applicants and borrowers as well as pricing data. *See* Financial Institutions Reform, Recovery, and Enforcement Act of 1989 § 1211(a)(3), 12 U.S.C. § 2803(b)(4) (2018).

5. *See* 12 U.S.C. §§ 2801(b), 2802(a)–(b), 2803(b)(4).

If we articulate racism as an atomized, participatory phenomenon rather than a structural one, we can start thinking about how to capture the effect of technology's fusion with actuarial metrics. This fusion informs a second feature of the card industry: the theory of network effects. The network effects theory rationalizes the fee structures that allocate card-system costs among consumers, merchants, and financial institutions. As discussed in Part I, apologists for the current interchange fee system consider this allocation necessary in two-sided markets where mutual benefits somehow arise from unequal cost sharing. The industry uses network effects to articulate cardholders' relationships with merchants, rather than the relationships and effects card-using consumers have with each other. When we understand racism's effects as originating from widely dispersed processes, we also have a better framework for describing how ostensibly neutral lending technologies rely on demographic proxies for race. The same "neutral" lending technologies place prospective cardholders into a stratified transactional arena. This stratification compounds existing inequalities through steering advantages toward premium consumers at the expense of those who are less affluent and more likely to be people of color.

A large body of scholarship discusses the "payment wars" between payment card networks and merchants,⁶ the allocation of benefits arising from interchange fees,⁷ the advent of algorithmic lending,⁸ and the effect of structural inequities within the credit

6. See generally Steven Semeraro, *Settlement Without Consent: Assessing the Credit Card Merchant Fee Class Action*, 2015 COLUM. BUS. L. REV. 186 (2015); Steven Semeraro, *The Antitrust Economics (and Law) of Surcharging Credit Card Transactions*, 14 STAN. J.L. BUS. & FIN. 343 (2009); Adam J. Levitin, *The Merchant-Bank Struggle for Control of Payment Systems*, 17 J. FIN. TRANSFORMATION 73 (2006).

7. See Steven Semeraro, *Assessing the Costs and Benefits of Credit Card Rewards: A Response to Who Gains and Who Loses from Credit Card Payments? Theory and Calibrations*, 25 CONSUMER L. REV. 30 (2012); Steven Semeraro, *The Economic Benefits of Credit Card Merchant Restraints: A Response to Adam Levitin*, 56 UCLA L. REV. DISC. 25 (2009) [hereinafter Semeraro, *Economic Benefits*]; Adam J. Levitin, *Priceless? The Economic Costs of Credit Card Merchant Restraints*, 55 UCLA L. REV. 1321 (2008) [hereinafter Levitin, *Priceless*]; Adam J. Levitin, *The Antitrust Super Bowl: America's Payment Systems, No-Surcharge Rules, and the Hidden Costs of Credit*, 3 BERKELEY BUS. L.J. 265 (2005) [hereinafter Levitin, *Antitrust Super Bowl*].

8. See, e.g., Kate Crawford & Jason Schultz, *Big Data and Due Process: Toward a Framework to Redress Predictive Privacy Harms*, 55 B.C. L. REV. 93, 109 (2014); see also FRANK PASQUALE, *THE BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION* (2015); Oscar H. Gandy, Jr., *Engaging Rational Discrimination: Exploring Reasons for Placing Regulatory Constraints on Decision Support Systems*, 12 ETHICS & INFO. TECH. 29 (2009).

card industry as a whole.⁹ This Article takes a consolidated view of this discourse through the lens of public law. Further, this Article observes how commercial actors either embrace public law's features or place themselves beyond its reach. The broad power that commercial credit card lenders possess complicates the protection of the poor and people of color in the modern marketplace.

This Article is organized as follows: Part I provides an overview of modern payment streams and uses a selection of literature to discuss how the concept of "network effects" fits within ongoing arguments for and against interchange fees. It also considers the informational power supporting the payment card networks' rent-seeking behavior. Part II discusses recent appellate jurisprudence arising from First Amendment challenges to statutory surcharge bans, the public policy arguments offered in their defense, and the historical juxtaposition of legislative prohibitions favoring surcharges rather than discounts. Part III recognizes the ways in which mainstream credit card use functions as an important gateway to consumer participation in the economy. Part III also considers the behavioral economics underpinning differential pricing strategies. It posits that successful First Amendment challenges to differential pricing schemes will present new questions. While credit card issuers can engineer prices in such a way that discourages credit card use overall, they tend to exploit behavioral theories against certain consumers who choose "back loading" fee structures. Back loading fee structures tend to consist of annual percentage rates and other cardholder terms that replace those often found in alluring introductory offers. Consumers who want to blunt the harmful effect of back loading practices through reduced card usage must also weigh this strategy against its costs. Federal law currently limits payment dispute resolution mechanisms to consumer credit card transactions. Consumers must therefore consider exploiting opportunities to improve their credit scores on the one hand, and ethically problematic pricing practices on the other. Part IV acknowledges commercial law's historical relationship with racial inequality. It discusses how algorithmic lending models obscure otherwise impermissible forms of racial bias in the credit card industry. Finally, Part IV considers network effects, pricing psychol-

9. See, e.g., Andrea Freeman, *Racism in the Credit Card Industry*, 95 N.C. L. REV. 1071 (2017); Andrea Freeman, *Payback: A Structural Analysis of the Credit Card Problem*, 55 ARIZ. L. REV. 151 (2013) [hereinafter Freeman, *Payback*]; Oren Bar-Gill & Ryan Bubb, *Credit Card Pricing: The Card Act and Beyond*, 97 CORNELL L. REV. 967 (2012); Angela Littwin, *Beyond Usury: A Study of Credit Card Use and Preference Among Low-Income Consumers*, 86 TEX. L. REV. 451 (2008); Michael S. Barr, *Banking the Poor*, 21 YALE J. ON REG. 121 (2004).

ogy, surcharges, and algorithms that combine to lure consumers into problematic arrangements that fall outside the normative construction of network effects and harm economically marginalized populations. This Article concludes with a call to find less-harmful ways to support consumer access to credit. It also suggests critical race scholars should examine whether it is possible for ethically minded consumers to use credit cards without participating in practices that harm marginalized users in the same marketplace.

I. OVERVIEW OF MODERN PAYMENT SYSTEMS

A. *Overview and Structure of Payment Networks*

The credit card industry grew from humble origins to become an important fixture in the American and global economies. Universal, non-retail credit cards first appeared in the late 1940s when Diners Club introduced a “travel and entertainment” card that business travelers could use to pay for meals.¹⁰ In 1958, Bank of America launched Visa as BankAmericard in Fresno, California.¹¹ Eight years later, a group of California banks developed the “Master Charge: The Interbank Card” to compete with BankAmericard.¹² The respective firms eventually adopted the names Visa and MasterCard. Successful marketing, an expanding consumerist ethos, more favorable attitudes toward credit, and congressional support for deregulation contributed to the successful expansion of credit card networks. However, two Supreme Court rulings and the gradual repeal of usury laws allowed credit cards to establish national lending practices.¹³

10. RONALD J. MANN, CHARGING AHEAD: THE GROWTH AND REGULATION OF PAYMENT CARD MARKETS 81–82 (2006) [hereinafter MANN, CHARGING AHEAD]. Non-retail cards differ from those issued by department stores and other retailers for exclusive use at the issuing entity’s business. Retail cards have been in use since the World War II, with Sears & Roebuck being among the earliest examples.

11. Timothy Wolters, “Carry Your Credit in Your Pocket”: *The Early History of the Credit Card at Bank of America and Chase Manhattan*, 1 ENTERPRISE & SOC’Y 315, 331 (2000).

12. Christine Zumello, *The “Everything Card” and Consumer Credit in the United States in the 1960s*, 85 BUS. HIST. REV. 551, 565 (2011).

13. *Smiley v. Citibank*, 517 U.S. 735, 737–40 (1996) (extending application of the *Marquette* Court’s ruling to fees); *Marquette Nat’l Bank of Minneapolis v. First of Omaha Serv. Corp.*, 439 U.S. 299, 301 (1978) (holding that the bank’s domicile was the controlling law governing usury caps rather than customers’ residency). For a history of state usury laws and the impact of the repeal of state usury laws on the credit card industry’s expansion, see Steven Mercatante, *The Deregulation of Usury Ceilings, Rise of Essay Credit, and Increasing Consumer Debt*, 53 S.D. L. REV. 37 (2008).

Over time, both Visa and MasterCard emerged as dominant global payment card associations operating as joint ventures owned by their member banks.¹⁴ Initially created as non-stock corporations, both card associations would eventually become publicly held corporate entities. MasterCard's spring 2006 Initial Public Offering (IPO) was noteworthy because of its complex multi-class structure of share ownership. The transaction carefully allocated ownership and control among its board and member banks in an effort to limit the specter of antitrust liability.¹⁵ Visa's March 2008 IPO was one of the largest in history and raised nearly \$18 billion in capital.¹⁶ Through issuer and acquirer agreements, which are discussed below, both companies continue selling proprietary payment products and services to banks and other financial institutions. The banks and other financial institutions then sell the payment products and services to consumers and merchants.

Credit card payments are expensive to process. Card networks, however, have succeeded in both promoting credit card usage and devising controversial cost allocation schemes.¹⁷ U.S. cardholders made 103.5 billion payments—worth \$5.65 trillion—in 2015.¹⁸ This figure reached 111.1 billion—worth \$5.98 trillion—in 2016.¹⁹ Credit and debit card payments registered the highest growth among mainstream payment typologies during the same period.²⁰ As card usage increases, so does the systemic power of credit card networks, especially those run by Visa and MasterCard. Both cards use similar networks that deploy three services operating in concert to facilitate merchant-to-consumer payments: (1) *issuer* banks issue credit cards to consumers for use at merchants'

14. For a general history of card associations, see Freeman, *Payback*, *supra* note 9, at 159–60; Alan S. Frankel & Allan L. Shampine, *The Economic Effects of Interchange Fees*, 63 ANTITRUST L.J. 627, 655–57 (2006); K. Craig Wildfang & Ryan Marth, *The Persistence of Antitrust Controversy and Litigation in Credit Card Networks*, 73 ANTITRUST L.J. 675, 675–707 (2006); William F. Baxter, *Bank Interchange of Transactional Paper: Legal and Economic Perspectives*, 26 J.L. & ECON. 541, 541–82 (1983).

15. See Adam J. Levitin, *Payment Wars: The Merchant-Bank Struggle for Control of Payment Systems*, 12 STAN. J.L. BUS. & FIN. 425, 463–67 (2007) (discussing MasterCard's post-IPO corporate governance structure in more detail).

16. Lilla Zuill, *Visa Raises \$17.9 billion in Record IPO*, REUTERS (Mar. 18, 2008), <https://reut.rs/2u9Rabu> [<https://perma.cc/PD54-28S7>].

17. See David Humphrey et al., *What Does It Cost to Make a Payment?*, 2 REV. NETWORK ECON. 159, 162–63 (2003) (estimating that credit card transactions cost merchants twice the amount required to process payment by PIN-based debit cards or checks).

18. FED. RESERVE BD., FEDERAL RESERVE PAYMENTS STUDY: 2017 ANNUAL SUPPLEMENT 1 (2017), <https://bit.ly/2PEejbg> [<https://perma.cc/495Q-8U96>].

19. *Id.*

20. *Id.*

establishments that accept the cards as forms of cashless payments; (2) *acquirer* banks offer commercial banking services to merchants to capture and process payments; and (3) third-party payment processors that typically provide authorization, clearing, and settlement (ACS) services to support the information relay between banks representing the consumer (issuer) and merchant (acquirer). The three parties coordinate a multi-step process during any given transaction. The process begins when a cardholder swipes her card. When she uses her card, the action triggers a near-instantaneous transmittal of information to and from the issuer bank.²¹ If the issuing bank approves the transaction, the issuing bank transfers funds to the acquirer. At the same time, the acquirer bank deposits the payment into the merchant's account, less a processing fee known as a *merchant discount*. The issuer card company later bills the consumer for the transaction, which appears on her bill in the next billing cycle. While the acquiring bank and third-party ACS service providers each receive portions of the merchant discount, the largest share goes to the issuer bank in the form of an *interchange fee*.

Interchange fee structures vary considerably.²² Issuer and acquirer banks negotiate interchange fee structures up stream. The banks set the rates based on a merchant's business sector and sales volume as well as the kind of card the consumer uses to initiate payment.²³ The banks' system of categorizing merchants by sector

21. Whereas Visa and MasterCard issue cards through retail banks, American Express and Discover function as both issuers and network operators. The allocation of merchant discount fees would vary slightly to account for issuer-operated networks.

22. Visa and MasterCard have complex interchange fee structures with more than thirty different tiers. For Visa interchange fees, see VISA, VISA USA INTERCHANGE REIMBURSEMENT FEES: VISA SUPPLEMENTAL REQUIREMENTS (2018), <https://vi.sa/2LtqkPw> [<https://perma.cc/GF23-CE3F>]. For MasterCard interchange fees, see *Understanding Interchange*, MASTERCARD, <https://bit.ly/2BgeDYK> [<https://perma.cc/P5EZ-FWZM>].

23. All but the largest merchants are excluded from negotiating interchange fee structures. *Downstream* segments of the market involve consumer and merchant relationships, whereas *upstream* segments focus on the commercial activity among issuers and acquirers. Card-based financial products are sold to the general public through retail banking outlets—the most common offerings being debit cards, credit cards, and prepaid “open loop” credit cards. Examples of “open loop” cards include *prepaid* or *secure* credit cards. They are “stored value” payment instruments that can be reloaded by the user. They differ from credit cards, which actually extend credit to account holders whenever used to make purchases. “Open loop” products can be used in any location and online. They differ from “closed loop” payment cards—like gift cards—that are redeemable at specific retailers.

operates alongside IRS Merchant Category Codes.²⁴ As of April 2018, for example, Visa's interchange fee rates combined a percentage of the transaction amount plus a flat fee, ranging from 1.15 percent plus \$0.05 to 2.98 percent plus \$0.10 per transaction.²⁵ These fees add up quickly and amount to substantial payment processing costs borne by merchants each year. In 2017, Visa and MasterCard generated \$54.69 billion in fees while processing more than \$2.5 trillion in transactions.²⁶ In the same year, American Express charged \$16.38 billion in fees to process nearly \$703 billion worth of transactions.²⁷ The same firms dominate global payment networks. Visa is by far the largest, accounting for approximately 56.5 percent of worldwide commercial and consumer transactions in 2017.²⁸ In the same year, MasterCard and American Express accounted for 31.4 percent and 9.2 percent of global transactions respectively.²⁹ Issuers use private ordering to sustain these revenues primarily through cardholder enrollment programs and by allocating card network operating in accordance with network effect principles.

B. *Merchant Restraints*

Payment processing occurs within a broader combined framework of public and private law. Issuer contracts govern the terms under which consumers obtain and use credit cards. Issuer contracts must comply with federal consumer protections such as the Truth in Lending Act (TILA)³⁰ and the Credit Card Accountability, Responsibility, and Disclosure Act of 2009 (CARD Act).³¹ Acquirer contracts—and in some states, no-surcharge laws—govern the legal relationship between merchants and the banks that supply the infrastructure to capture payments that are generated in con-

24. There are Merchant Category Codes (MCCs) for different kinds of businesses accepting payments subject to reporting requirements. For example, the MCC is 4215 for courier services, 1731 for electrical contractors, and 5300 for wholesale clubs. Rev. Proc. 2004-43.1, 2004-31 I.R.B., <https://bit.ly/2Gb05PI> [<https://perma.cc/WRB7-QQAT>].

25. VISA, *supra* note 22, at 7–8.

26. *U.S. Merchant Card Fees 2017*, NILSON REP. (MSN Consultants, Inc., Carpenteria, Cal.), May 2018, at 7 [hereinafter *2017 Merchant Card Fees*], <https://bit.ly/2RZuWQC> [<https://perma.cc/X5UU-QXUY>].

27. *Id.*

28. Visa Inc., Annual Report (Form 10-K) 15 (Nov. 16, 2017), <https://bit.ly/2SQ0hWh> [<https://perma.cc/WJX6-2MMT>].

29. *Id.* JBC and Discover held 2.1 percent and 1.3 percent of global sales volumes, respectively. *Id.*

30. 15 U.S.C. § 1601 (2018).

31. Credit Card Accountability, Responsibility, and Disclosure Act of 2009, Pub. L. No. 111-24, 123 Stat. 1734 (codified as amended in scattered sections of 5, 11, 15, 20, and 31 U.S.C.).

nection with merchant businesses. Acquirer-side services include access to point-of-sale terminals and payment processing infrastructure.

Acquirer-side contracts tend to contain controversial *merchant restraints*. Merchant restraints regulate the conduct of merchants who accept credit card payments through five kinds of rules: (1) no-surcharge rules; (2) no-discount rules; (3) honor-all-cards rules; (4) anti-steering and nondisclosure rules; and (5) no-minimum and no-maximum purchase rules. The rules are controversial for a host of reasons. One controversy surrounding the rules is that the merchant restraint rules effectively support the flow of interchange fee revenues to issuer banks. Another controversy is that the rules limit the merchant's capacity to price goods according to payment processing costs on a per-transaction basis. The rules also prevent merchants from signaling payment choice costs to consumers. Additionally, the rules prevent credit card companies from unfairly shifting the cost of rewards-based card programs to merchants. Finally, the rules ultimately reallocate system costs to consumers who do not use top-tier card products whilst benefiting those who do. Each of the merchant restraints is briefly discussed below.

1. *No-Surcharge Rules*

No-surcharge rules prohibit the imposition of a surcharge for payments made with credit or debit cards. No-surcharge rules effectively limit the consumer's capacity to see any nexus between the price of goods or services and payment choice. Merchants seeking to preserve their profit margins and comply with this rule must, therefore, structure their prices to account for the most expensive processing costs.

2. *No-Discount Rules*

While surcharge bans prevent upward price adjustments, *no-discount rules* prevent merchants from discounting prices based on payment method choice. The seemingly artificial distinction is relevant because the card industry has been more consistent in opposing surcharges as opposed to any kind of dual pricing. This preference is reflected in the history of federal and state legislative provisions. Federal statutory treatment of the two rules, beginning with the 1974 amendments to TILA, reveals congressional efforts to wrestle with the debate about surcharges and discounts for a ten-year period. The 1974 amendments required networks to allow merchant discounting, subject to proper disclosure and a five per-

cent cap.³² While Congress removed the five percent cap in 1981,³³ the disclosure requirement remained in effect. In 1976, while the authorization of discounts remained, Congress banned merchants' use of surcharges by amending TILA again.³⁴ Congress used the amendment to refine the respective meanings of "surcharge" and "discount" and defined the terms according to their commonly understood usage.³⁵ Congress allowed the ban to expire in 1984 over the objection of consumer advocates and the Federal Reserve Board.³⁶ Consequently, credit card networks revived anti-surcharge clauses, which remained in effect until 2005.³⁷ In 2005, another spate of antitrust litigation resulted in Visa, MasterCard, and American Express removing anti-surcharge clauses from their merchant restraints as part of a 2013 settlement.³⁸ The only surviving prohibitions against merchants' surcharge imposition can be found in state statutes.³⁹ The state statutes are vestiges of 1980s-era industry lobbying. Recent First Amendment challenges target statutes that originate in this time period.

32. See Fair Credit Billing Act, 15 U.S.C. §§ 1666–1666j (2018).

33. See Cash Discount Act, Pub. L. No. 97-25, 95 Stat. 144 (1981).

34. See Pub. L. No. 94-222, 90 Stat. 197 (codified as amended in scattered sections of 12 and 15 U.S.C.).

35. See 15 U.S.C. § 1602(q) (2018) (defining "discount" as "a reduction made from the regular price"); 15 U.S.C. § 1602(r) (defining "surcharge" as "any means of increasing the regular price to a cardholder which is not imposed upon customers paying by cash, check, or similar means")

36. Cf. Cash Discount Act, Pub. L. No. 97-25, § 201, 95 Stat. 144 (expired 1984); Financial Institutions Regulatory and Interest Rate Control Act of 1978, Pub. L. No. 95-630, § 1501, 92 Stat. 3641, 3713 (expired 1981); *Cash Discount Act of 1981: Hearing on S. 414 Before the S. Banking Comm.*, 97th Cong. 9–10 (1981).

37. Complaint, *Photos Etc. Corp. v. Visa U.S.A., Inc.*, No. 3:05-CV-01007 (D. Conn. filed June 22, 2005) (alleging Visa, MasterCard, and issuing and acquiring banks conspired to fix interchange fees in violation of section 1 of the Sherman Act).

38. *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, 986 F. Supp. 2d 207, 217 (E.D.N.Y. 2013). Dissatisfied with the settlement, a number of larger merchants successfully appealed to the Second Circuit. See *In re Payment Card Interchange Fee & Merch. Disc. Antitrust Litig.*, 827 F.3d 223, 227 (2d Cir. 2016). It is worth noting that the 2010 Durbin Amendment to the Dodd-Frank Act removed card companies' restrictions on discounting credit cards at the network level, barring credit card companies from prohibiting merchants from discounting their cards. See 15 U.S.C. § 1693o-2 (2018). This is a network-level change, which means merchants can discount certain payment methods—such as cash versus credit cards—but cannot offer or deny discounts based on an issuer or card type—such as discounting all Discover Cards but not discounting American Express cards. However, networks retain freedom to impose no-surcharge rules.

39. For a comprehensive list of all surcharge statutes, see Samuel J. Merchant, Comment, *Merchant Restraints: Credit-Card-Transaction Surcharging and Interchange-Fee Regulation in the Wake of Landmark Industry Changes*, 68 OKLA. L. REV. 327, 378 (2016).

3. *Honor-all-Cards Rules*

Honor-all-cards rules require merchants who accept any card from a credit card network to accept all cards within that particular brand, regardless of the interchange fees associated with processing. A variant on this rule, known as the *honor-all-outlets rule*, requires the merchant to accept the brand's cards at all of its stores, web-sites, and discount or clearance locations. A 2003 antitrust settlement modified the rule so that merchants accepting Visa or MasterCard debit cards are not required to accept credit cards from these networks.⁴⁰

4. *Anti-Steering Rules*

Anti-steering rules prevent merchants from using price signals to steer customers towards less expensive payment products. When merchants steer customers towards less expensive payment products, the merchants effectively express a preference for one product, brand, network, or payment type over others. Visa and MasterCard have somewhat relaxed their anti-steering rules in the wake of antitrust settlements, but American Express awaits a ruling from the Supreme Court, which heard Ohio's appeal from a Second Circuit ruling on February 27, 2018.⁴¹

5. *No-Minimum/No-Maximum Rules*

No-minimum/no-maximum rules aim to prohibit merchants from declining to accept credit cards as payment for unusually low or unusually high transaction amounts. Merchants may be tempted to decline card-based payments for items like chewing gum or small-margin transactions. Small-margin transactions can eliminate the merchant's profit when a consumer pays with an elite card. At the other end of the cost continuum, high-value items worth tens of thousands of dollars will incur substantial payment processing fees. For example, merchants selling \$300,000 worth of manufacturing equipment are likely not keen about surrendering two percent of the transaction cost (after applicable taxes) to the credit card issuer.

The aforementioned rules produce several important consequences. Firstly, the rules promote adoption of pricing norms that do not reflect the wide range of costs associated with processing

40. See *In re Visa Check/Mastermoney Antitrust Litig.*, 297 F. Supp. 2d 503, 508 (E.D.N.Y. 2003).

41. Chad Bray, *Visa, MasterCard Win Approval of Settlement in 'Anti-Steering' Case*, WALL ST. J. (July 20, 2011), <https://on.wsj.com/2S1xjCD> [<https://perma.cc/63NJ-A3W3>]; see also *United States v. Am. Express Co.*, 838 F.3d 179, 192 (2d Cir. 2016).

different payment products. Secondly, these rules also deny consumers the informational transparency they need to factor transaction costs when choosing one payment type over another. Additionally, while wealthier customers earn perks through increased card usage, poorer consumers use less desirable payment options to buy identically priced goods. The disparate realities for different types of cardholders exacerbate already existing social inequities. Finally, the rules mean that merchants pay different fees to process payment types from both wealthier consumers and poorer consumers. Merchants, however, are not allowed to allocate network costs among cardholders according to the status of payment products consumers' use at point of sale.

C. *Network Effects*

The justifications for payment card network rules and fees are premised on the notion that the rules and fees support a consumption-based economy. The payment card rules and fees give consumers access to credit that they can use to patronize merchants. The card rules and fees also provide the infrastructure needed to capture and process cashless forms of payment. Payment card networks commonly invoke the lexicon of *network effects* (otherwise known as “network externalities”) in defense of interchange fees and merchant restraints. The theoretical construct of network effects appears ideally suited to discussions about the function and design of card networks. Network effects theory is a useful way of analyzing any kind of system that brokers connections between buyers and sellers, harmonizes commercial transactional intricacies, promotes efficiency by allocating costs, supports convenient and secure mobile commerce, or establishes commercial norms.

A network effect exists in two-sided markets, where consumers and merchants have a mutual economic interest in commercial interaction. Consumers and merchants represent two distinct constituencies with different interests.⁴² The parties agree to unequal cost sharing such that merchants on one side of the marketplace bear most of the marketplace operating expense. Credit card networks

42. For literature on two-sided markets, see Mark Armstrong, *Competition in Two-sided Markets*, 37 RAND J. ECON. 668 (2006); Bernard Caillaud & Bruno Julien, *Chicken & Egg: Competing Matchmakers* (Apr. 24, 2001) (unpublished manuscript), <https://bit.ly/2d3NfRW> [<https://perma.cc/8V9M-VU8R>]; Sujit Chakravorti & Roberto Roson, *Platform Competition in Two-Sided Markets: The Case of Payment Networks*, 5 REV. NETWORK ECON. 118 (2006); Geoffrey Parker & Marshall Van Alstyne, *Two-Sided Network Effects: A Theory of Information Product Design*, 51 MGMT. SCI. 1494 (2005); J.C. Rochet & J. Tirole, *Platform Competition in Two-Sided Markets*, 4 J. EUROPEAN ECON. ASS'N 990 (2003).

use a similar model to allocate payment processing costs.⁴³ One scholar describes network effects in the credit card context as follows:

In such a two-sided market, an efficient pricing structure must discriminate between the two customer groups based upon the cost of serving each group and their relative demand elasticities. Because merchant demand for credit cards is less elastic than consumer demand, an efficient pricing structure will place a larger cost burden on merchants.⁴⁴

The two-market network design often turns on two critical questions. The first considers which group in the market should be subsidized. The second considers the market subsidy's longer-term utility. A successful network requires the subsidized group to be of value to a subsidizing group. In a two-market network with interchange fees that subsidize one group, the subsidizing group's members are willing to pay what is required to access the network. A network's value declines if its subsidized group can access more than one network—a concept known as “multi-homing.” In other words, individual consumers may sustain varied payment practices, including credit cards, cash, and checks. Such consumer spending options produce multi-homing results because the consumer is not limited to the network subsidized by the merchants. The consumer's payment options diminish the rent-seeking power of individual payment networks.⁴⁵ Since consumers are a multi-homing subsidized group in the credit card two-market network, the network's value diminishes. Historically, card networks sought to contain consumer upstream multi-homing with contract terms that prevented member banks from issuing competitors' cards. How-

43. Thomas R. Eisenmann et al., *Strategies for Two-Sided Markets*, HARV. BUS. REV., Oct. 2006, <https://bit.ly/1RSHQdK> [<https://perma.cc/9W6R-4JVX>].

44. Semeraro, *Economic Benefits*, *supra* note 7, at 26.

45. Rent-seeking occurs where a party manipulates their surrounding social, political, or legal landscape to secure economic rent without creating new wealth. For example, an actor can lobby the government to enact legislation compelling consumers to buy its products or use some combination of its market dominance and privately contract to limit competition. Gordon Tullock pioneered the concept of rent-seeking in the regulatory context. *See generally* Gordon Tullock, *The Welfare Costs of Tariffs, Monopolies, and Theft*, 5 W. ECON. J. 224 (1967) (establishing the concept of rent-seeking in the regulatory context). But Anne Krueger subsequently coined the phrase. *See generally* Anne O. Krueger, *The Political Economy of the Rent-Seeking Society*, 64 AM. ECON. REV. 291 (1974) (coining the phrase “rent-seeking”).

ever, litigation put an end to card networks' ability to seek such contract terms in 2003.⁴⁶

Scholars have competing views of multi-homing and its significance to networks. Some theorists suggest that in competitive, multi-network markets, subsidizers may be less willing to pay as much to access—and therefore subsidize—other user groups. Subsidizer withdrawal from the network results in the network operator having to reduce or eliminate subsidies previously available to one of its user groups.⁴⁷ In other words, the network's rent-seeking capacity underpins the power to shift operating costs between participants. Conversely, another argument is that consumers with multi-network access tend to favor one over others, which may modify the impact of multi-homing configurations.⁴⁸

The argument to rationalize network effects as a consumer protection concern, cost allocation model, or a regulatory virtue seem logical until one looks back to history. Variants on the disputed honor-all-cards and non-differentiation rules⁴⁹ were responses to problems posed by federal prohibitions of interstate branch banking. The restrictions remained in effect until 1994 when Congress passed legislation eliminating geographic restrictions that prevented formation of interstate branch banking.⁵⁰ Prior to legislative reforms that ended restrictions, banks formed card associations to navigate the constraints and developed rules to ensure equal cardholder treatment throughout member institutions.⁵¹

As in any context where one population exploits another population to its benefit, an examination of race and socioeconomic dynamics in the context of network effects is warranted. Part IV of this Article interposes race and class into the discussion of network

46. *United States v. Visa U.S.A., Inc.*, No. 98 Civ. 7076 (BSJ), 2001 U.S. Dist. LEXIS 20222 (S.D.N.Y. Nov. 26, 2001), *aff'd*, 344 F.3d 229 (2d Cir. 2003), *cert. denied sub nom. Visa U.S.A., Inc. v. United States*, 543 U.S. 811 (2004).

47. See Graeme Guthrie & Julian Wright, *Competing Payment Schemes*, 55 J. INDUS. ECON. 37 (2007); Sujit Chakravorti, *Externalities in Payment Card Networks: Theory and Evidence*, 9 REV. NETWORK ECON. 1 (2010).

48. Marc Rysman, *The Economics of Two-Sided Markets*, 23 J. ECON. PERSPECTIVES 125 (2009); Marc Rysman, *An Empirical Analysis of Payment Card Usage*, 55 J. INDUS. ECON. 1 (2007).

49. Non-differentiation rules prohibit merchants from charging different prices for particular types of card products within the same brand. See Levitin, *Priceless*, *supra* note 7, at 1331, 1367–72.

50. Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994, Pub. L. No. 103-328, 108 Stat. 2338 (codified as amended in scattered sections of 12 U.S.C.); Gramm-Leach-Bliley Act, Pub. L. No. 106-102, 113 Stat. 1338 (codified as amended in scattered sections of 12 and 15 U.S.C.).

51. Levitin, *Priceless*, *supra* note 7, at 1372.

effects to consider how First Amendment challenges complicate responses to racism within the card industry. It posits that recent appellate rulings further complicate options for the poor, whose populations disproportionately include people of color. The recent court rulings trap the poor between two undesirable choices: (1) remain in cashless economies, but abandon the use of cashless payment methods commonly used to fortify credit ratings; or (2) participate in card-based payment arenas where network effects frequently target them and depend on their exploitation to service more affluent segments of the card market. More immediately, however, the discussion turns to the First Amendment and its recent entry into the battle over credit card surcharges.

II. OVERVIEW OF RECENT JURISPRUDENCE

A. *The Concurrent Development of Payment Card Use and the Commercial Speech Doctrine*

Although statutory surcharge bans have existed in some form for decades, merchants have not invoked First Amendment arguments until recently. The credit card industry and the commercial speech doctrine have interesting historical trajectories when we consider them alongside one another. The respective histories explain why constitutional challenges to surcharge bans did not occur sooner. In 1942, the United States Supreme Court decided that the First Amendment did not apply to the government's regulation of commercial speech.⁵² The 1976 *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc.*⁵³ decision marked a formal change in the Court's position.⁵⁴ In *Virginia Citizens*, the Supreme Court extended First Amendment protections to commercial speech.⁵⁵ Four years would pass before the Court's 1980 ruling in *Central Hudson Gas & Electric Corp. v. Public Service Commission*.⁵⁶ *Central Hudson* established a four-part test for determining when restrictions on speech violate First Amendment protections.⁵⁷

The credit card industry underwent considerable change in the 38 years spanning the Court's initial opinion on commercial speech and its *Central Hudson* ruling. Throughout much of that period, the

52. *Valentine v. Chrestensen*, 316 U.S. 52, 54 (1942).

53. *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc.*, 425 U.S. 748 (1976).

54. *Id.* at 761–70.

55. *Id.* at 762.

56. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n*, 447 U.S. 557 (1980).

57. *Id.* at 566.

McFadden Act's⁵⁸ constraints and state usury laws hindered the industry's growth. The Court's ruling in *Marquette National Bank of Minneapolis v. First of Omaha Service Corp.*⁵⁹ was an important step in removing state usury caps that contributed to the McFadden Act's hindrance on industry growth. The ruling held that states could not enforce anti-usury laws against nationally chartered banks. This interpretation of the National Bank Act of 1864 allowed such banks to "export" interest rates into any state, ignoring local usury laws.⁶⁰ Regardless of *Marquette National Bank's* impact, however, cardholder enrollment in an era preceding Internet commerce remained relatively modest by today's standards. Card industry practices had been the subject of antitrust claims,⁶¹ suggesting that merchants developed a shrewd understanding of the commercial interests at stake in coping with merchant restraints. Yet the antitrust conflicts would not intensify until the period following bank deregulations that aided in bank expansion and the popularization of cashless payments.

One can only speculate as to why merchants did not take advantage of the commercial speech doctrine sooner through an attack on the federal surcharge ban. The surcharge ban predated *Central Hudson* and remained in effect until 1984.⁶² Instead of using *Central Hudson* to challenge the ban, card networks and merchants seemed more interested in fighting to commandeer government's legislative machinery to further their respective interests. The former group appeared to prevail between 1976 and 1984 when federal surcharge bans were in place. When the bans expired, the card industry's strategy shifted to lobbying states whose aggregate population represented well over half of all Americans.⁶³ A compromise in the form of legislation capping interchange fees seemed likely during the Great Recession and the subprime crisis when

58. McFadden Act, Pub. L. No. 639, 69th Cong., H.R. 2 (1927).

59. *Marquette Nat'l Bank of Minneapolis v. First of Omaha Serv. Corp.*, 439 U.S. 299 (1978)

60. See 12 U.S.C. § 85 (2018).

61. See, e.g., *Worthen Bank & Trust Co. v. Nat'l BankAmericard Inc.*, 345 F. Supp. 1309 (E.D. Ark. 1972), *rev'd*, 485 F.2d 119 (8th Cir. 1973).

62. See Cash Discount Act, Pub. L. No. 97-25, § 201, 95 Stat. 144 (expired 1984).

63. See *Expressions Hair Design v. Schneiderman*, 975 F. Supp. 2d 430, 439 (S.D.N.Y. 2013). "At that point, credit-card companies began lobbying for state-level surcharge bans. Ultimately, a number of states enacted their own variations of anti-surcharge legislation." *Expressions Hair Design v. Schneiderman*, No. 100, 2018 WL 5258853, at *15 (N.Y. Oct. 23, 2018) (Garcia, J., dissenting). See also, Levitin, *Priceless*, at 8 n.7 (stating the legislative history for 11 of the 12 states with no-surcharge rules). Most state no-surcharge rules appear to be the result of credit card industry lobbying in the 1980s.

there was widespread public antipathy towards banks. Despite popular appetite for expanding financial regulations, Congress's consideration of the Credit Card Fair Fee Act of 2008, however, did not survive committee hearings.⁶⁴ Once efforts to legislatively restrict interchange fees failed, merchants turned to the courts and the First Amendment to challenge surcharge bans.

B. *Appellate Jurisprudence*

When it extended First Amendment protection to commercial speech, the Supreme Court expressed concern for speech's informational importance to consumers.⁶⁵ The Court stressed: (1) the pressing importance of protecting the flow of commercial information that consumers rely on, particularly in the context of *Virginia Citizens* which involved a challenge to a ban on advertising drug prices;⁶⁶ (2) the import of marketplace efficiency accomplished through communicating provenance, purpose, and prices of goods or services to consumers, as consumers make informed purchasing decisions;⁶⁷ and (3) the public interest in the free flow of commercial speech that supports enlightened public decision-making in a democracy.⁶⁸

First Amendment challenges to surcharge bans question merchants' capacity to give consumers information about the relationship between pricing and payment methods at points of sale. Merchants argue that sharing information about payment processing costs with customers helps consumers make informed choices about how to pay for goods and services in the modern marketplace. The theory is that the government is imposing content-based restrictions on commercial speech, which is subject to intermediate scrutiny.⁶⁹ Intermediate scrutiny is an appropriate constitutional test for content-based restrictions on commercial speech because of the robustness of the speech and the greater need for flexibility when regulating this particular kind of expression.⁷⁰ For commercial categories of speech, the inquiry permits "restrictions directed

64. Credit Card Fair Fee Act of 2008, H.R. 5546, 110th Cong. (2008). House Representative John Conyers, sponsored this bill, which would have imposed a package of interchange fee regulations.

65. *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council*, 425 U.S. 748, 749 (1976).

66. *Id.* at 763.

67. *Id.* at 765.

68. *Id.* at 764.

69. *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm'n*, 447 U.S. 557, 573 (1980).

70. *Id.*

at commerce or conduct”—assuming the restrictions further a substantial government interest and are narrowly tailored—even if the restrictions incidentally limit speech.⁷¹ In *Central Hudson*, the Court established the now well-known test for whether constraints on speech violate the First Amendment.⁷² When determining if the government may restrict commercial speech without violating the First Amendment, the court considers the *Central Hudson* test, which asks whether: (1) the commercial speech concerns lawful activity and is not misleading; (2) the government’s asserted interest in restricting the speech is substantial; (3) the restriction directly advances the government’s asserted interest; and (4) the restriction is narrowly drawn to serve the asserted government interest.⁷³

There has been limited appellate discussion of *Central Hudson* in the context of surcharge bans for two reasons. First, only two circuit courts that have had the opportunity to apply *Central Hudson* concluded the challenged statutes regulated speech.⁷⁴ The second reason simply relates to timing. The appellate challenges originated from four jurisdictions, three of which were decided before the Supreme Court considered the issue in *Expressions Hair Design v. Schneiderman*.⁷⁵ *Expressions Hair Design* marked the Court’s first time hearing First Amendment challenges to surcharge bans. By this time, only one circuit court opinion had concluded that such a ban implicated speech rather than conduct.⁷⁶ As discussed above, the Supreme Court’s holding in *Expressions Hair Design* narrowed the scope of inquiry by settling the question of whether the challenged statutes regulated conduct or speech.⁷⁷ The next circuit court to address whether surcharge bans implicate First Amendment protections followed the Supreme Court’s direction and applied the *Central Hudson* test.⁷⁸ A brief discussion of each circuit court decision follows.

In 2015, before the Supreme Court’s decision in *Expressions Hair Design*, the Eleventh Circuit was the first circuit court to ad-

71. *Sorrell v. IMS Health Inc.*, 564 U.S. 552, 565–67 (2011).

72. *Central Hudson*, 447 U.S. at 566.

73. *Id.*

74. Whereas *Dana’s Railroad Supply* attacked the state law’s facial validity, the plaintiffs in *Italian Colors* challenged the statute as applied. *See Italian Colors Rest. v. Becerra*, 878 F.3d 1165, 1172 (9th Cir. 2018); *Dana’s R.R. Supply v. Att’y Gen.*, 807 F.3d 1235, 1235 (11th Cir. 2015).

75. *Expressions Hair Design v. Schneiderman*, 137 S. Ct. 1144 (2017).

76. *See Dana’s R.R. Supply*, 807 F.3d at 1241–46 (finding Florida’s surcharge ban statute restricted speech).

77. As of June 2018, the Second Circuit has not revisited its prior opinion in *Expressions Hair Design*, which was vacated and remanded.

78. *See Italian Colors*, 878 F.3d at 1174–79.

dress whether a certain state statute banning surcharges implicated the First Amendment.⁷⁹ Finding Florida's surcharge ban did implicate a restriction on speech, the court issued the first appellate ruling that applied *Central Hudson* to a surcharge ban.⁸⁰ The Eleventh Circuit's majority opinion characterized the Florida statute's surcharge ban as regulating speech rather than conduct and refused to recognize any distinction between discounts and surcharge.⁸¹ The disputed statutory language provided that:

(1) A seller or lessor in a sales or lease transaction may not impose a surcharge on the buyer or lessee for electing to use a credit card in lieu of payment by cash, check, or similar means, if the seller or lessor accepts payment by credit card. A surcharge is any additional amount imposed at the time of a sale or lease transaction by the seller or lessor that increases the charge to the buyer or lessee for the privilege of using a credit card to make payment.

...

This section does not apply to the offering of a discount for the purpose of inducing payment by cash, check, or other means not involving the use of a credit card, if the discount is offered to all prospective customers.

(2) A person who violates the provisions of subsection (1) is guilty of a misdemeanor of the second degree.⁸²

In a search for reasonable alternative constructions, the court ruled out arguments that the statute regulated dual-pricing or "bait-and-switch" tactics presumably by failing to disclose price differential until after the point of sale. The court went on to use a humorous analogy to explain treatment of the statute as targeting speech rather than conduct:

Ostensibly worried about customers' dining experiences being adversely affected by their unquenched thirst, a state makes it a crime for restauranteurs to serve *half-empty* beverages. Restauranteurs are, however, expressly allowed to serve *half-full* beverages. The state has no greater regulatory scheme requiring restaurants to provide beverage refills, nor does it even require that beverages be served at all. Would we say that what the state has done merely regulates the economic affairs of the food-service industry? Of course not. Liability for violating this glass-

79. *Dana's R.R. Supply*, 807 F.3d at 1235.

80. *Id.*

81. *Id.* at 1243 ("Attempting to read Florida's no-surcharge law as a regulation of economic conduct rather than as a restriction on speech casts the judicial Theseus into the depths of a lexical labyrinth.")

82. FLA. STAT. § 501.0117 (2018).

half-full mandate turns solely on the restaurateurs' choice of words. It is therefore a restriction of speech, not conduct.⁸³

In applying *Central Hudson*, the Eleventh Circuit found that the state failed the test's first prong and rejected arguments that the statute merely restricted speech in an attempt to prevent illegal conduct. The state failed the second prong because it could not sufficiently articulate a compelling "consumer protection" concern. The court addressed the third and fourth prongs jointly, finding that the no-surcharge law advanced no substantial state interest.⁸⁴ Additionally, the court found that there was no evidence that the restriction was tailored, let alone narrowly tailored, to meet any legitimate government interest.⁸⁵ Further, the government had carved out an exception for state agencies to charge card users "convenience fees" for using a credit card to pay for services.⁸⁶ The court noted it was especially hard for the state to justify the statute in the name of public interest while suspending the statute's application to state agencies.⁸⁷

In 2015, and in what would become the Supreme Court case on the issue, the Second Circuit held in *Expressions Hair Design* that the statute in question did not restrict speech, but regulated conduct.⁸⁸ Since the court found no speech regulation, the *Central Hudson* test was irrelevant.⁸⁹ In reviewing challenges to New York's surcharge ban, the Second Circuit interpreted language similar to expired federal TILA provisions.⁹⁰ The New York statute provided that "[n]o seller in any sales transaction may impose a surcharge on a holder who elects to use a credit card in lieu of payment by cash, check, or similar means."⁹¹ Reversing the district court's ruling, the Second Circuit held the law "does not violate the

83. *Dana's R.R. Supply*, 807 F.3d at 1245.

84. *Id.* at 1250.

85. *Id.* at 1249.

86. *Id.* at 1250; see FLA. STAT. § 215.322(2), (3)(b) (2018).

87. *Id.*

88. *Expressions Hair Design v. Schneiderman*, 808 F.3d 118, 130 (2d Cir. 2015).

89. *Id.*

90. Compare 15 U.S.C. § 1666f(a)(2) (1982), with N.Y. GEN. BUS. LAW § 518 (Consol. 2016).

91. N.Y. GEN. BUS. LAW § 518. Two salient features emerge from this language. First, it differs from its federal counterpart in that it did not define "surcharge." See 15 U.S.C. § 1666f(a)(2) (1982). Second, it was completely silent as to merchants' freedom to induce payments by cash, check, or other means by offering discounts.

First Amendment as applied to single-sticker-price sellers.”⁹² The court reasoned that price, though communicated through language, is not necessarily “speech” within the meaning of the First Amendment.⁹³ The court acknowledged that the law prevented sellers from “referring to credit-cash price differentials as credit-card surcharges, or from engaging in advocacy related to credit-card surcharges.”⁹⁴ Nonetheless, the court concluded that prohibitions against imposing credit card surcharges regulated conduct rather than speech.⁹⁵ The court accorded weight to the fact that the New York law was silent about the treatment of price signaling outside the single-sticker framework.⁹⁶ Since the statute applied only to single-sticker pricing, the court stopped short of deciding whether New York’s law applied to sellers who use “dual-pricing.” Merchants engage in dual pricing when they post one price for credit card users and another for those who use cash.⁹⁷ Since dual pricing presents possible different issues than single-sticker pricing, the court only examined the statute as applied to single-sticker pricing.⁹⁸

In 2016, the Fifth Circuit considered a Texas statute that restricted surcharges.⁹⁹ After discussing the Eleventh and Second Circuit decisions above, the court distinguished the Eleventh Circuit’s interpretation of the Florida statute on the basis that the Florida statute expressly permitted discounts.¹⁰⁰ The court reasoned that the New York and Texas statutes, on the other hand, were “completely silent regarding other forms of pricing.”¹⁰¹ Under the Texas statute, “a seller may not impose a surcharge on a buyer who uses a credit card for an extension of credit instead of cash, a check, or a similar means of payment.”¹⁰² The court disagreed with the Eleventh Circuit’s view that discounts and surcharges were mathe-

92. *Expressions Hair Design v. Schneiderman*, 808 F.3d 118, 130 (2d Cir. 2015).

93. *Id.*

94. *Id.* at 131.

95. *Id.* at 135.

96. *Id.* at 137.

97. *Id.* at 135–37; *R.R. Comm’n of Texas v. Pullman Co.*, 312 U.S. 496, 501 (1941).

98. *Expressions Hair Design*, 808 F.3d at 135–37.

99. *Rowell v. Pettijohn*, 816 F.3d 73, 81 (5th Cir. 2016), *vacated*, 137 S. Ct. 1431 (2017).

100. *Id.* at 80; *see* FLA. STAT. § 215.322(2), (3)(b) (2018).

101. *Pettijohn*, 816 F.3d at 81.

102. *Id.* at 80 (citing TEX. BUS. & COM. CODE ANN. § 604A.0021 (West 2018)). We await this court’s analysis of § 518 as a speech regulation following the Supreme Court’s remand. *See also* *Expressions Hair Design v. Schneiderman*, 137 S. Ct. 1144, 1151 (2017).

matically similar.¹⁰³ The majority reasoned that treating the two as interchangeable concepts “overlooked differences in the economic activity, and that the anti-surcharge law solely bans application of additional fees above the normal price and nothing more.”¹⁰⁴

The Supreme Court remanded *Expressions Hair Design* to the Second Circuit, before the Ninth Circuit heard oral arguments in another surcharge-ban challenge. The Court’s decision in *Expressions Hair Design* settled the debate about whether surcharge bans regulated speech or conduct, flatly resolving surcharge bans as speech regulation.¹⁰⁵ Adhering to *Expressions Hair Design*, the Ninth Circuit focused solely on the First Amendment arguments and applied *Central Hudson*.¹⁰⁶ California’s Civil Code provided that:

No retailer in any sales, service, or lease transaction with a consumer may impose a surcharge on a cardholder who elects to use a credit card in lieu of payment by cash, check, or similar means. A retailer may, however, offer discounts for the purpose of inducing payment by cash, check, or other means not involving the use of a credit card, provided that the discount is offered to all prospective buyers.¹⁰⁷

Because the plaintiffs challenged the statute as applied, the Ninth Circuit focused on those sections of the disputed code pertaining to the plaintiffs, namely the dual-sticker-pricing scheme.¹⁰⁸ California’s statute allowed merchants to induce other forms of payments using discounts but not surcharges. The court, however, noted the plaintiffs’ preference for using surcharges. The court noted that the psychological theory informing surcharges—known as *framing*—is central to both the statute’s design and the merchants’ preferred method of communicating price.¹⁰⁹

Applying *Central Hudson*, the Ninth Circuit summarily addressed the first two prongs and found that the plaintiffs were not engaged in illegal or misleading activity.¹¹⁰ Further, the court found that California’s stated interest “promote[s] the effective operation of the free market and protect[s] consumers from deceptive

103. *Pettijohn*, 816 F.3d at 83 (distinguishing *Dana’s R.R. Supply v. Att’y Gen.*, 807 F.3d 1235, 1245 (11th Cir. 2015)).

104. *Id.*

105. *Italian Colors Restaurant v. Becerra*, 878 F.3d 1165, 1175 (9th Cir. 2018).

106. *Id.*

107. CAL. CIV. CODE § 1748.1(a) (West 2018).

108. *Italian Colors*, 878 F.3d at 1172.

109. *Id.* at 1169.

110. *Id.* at 1176–77.

price increases.”¹¹¹ Moving on to the third element of the test, the court determined that the state “pointed to no evidence that surcharges posed economic dangers that were in fact real” before the statute’s enactment or that the statute resulted in alleviating those dangers.¹¹² The Ninth Circuit also determined that California’s broad exemptions for state and municipal agencies undermined the state’s purported interest in upholding the statute.¹¹³

Finally, the Ninth Circuit found that California’s statute failed to meet the final prong of the *Central Hudson* test. The court reasoned that “there is no reasonable fit between the broad scope of [the statute]—covering even plaintiffs’ non-misleading speech—and the asserted state interest.”¹¹⁴ California, the court said, had “other, more narrowly tailored, means” of preventing fraud or consumer deception.¹¹⁵ For example, the state could simply ban deceptive or misleading surcharges, require retailers to disclose their surcharges both before and at the point of sale,¹¹⁶ or enforce existing laws banning unfair business practices and misleading pricing advertising.¹¹⁷

C. Themes Emerging from Appellate Opinions

The Supreme Court has yet to substantively address the First Amendment question as it relates to surcharges. Although circuit rulings are still split, the Court has since vacated the Fifth Circuit’s decision¹¹⁸ and denied certiorari in the Eleventh Circuit’s decision.¹¹⁹ Review of these cases, however, yields three observations. First, the challenged statutes were consistent in their prohibition against communicating surcharges while showing varied interest in alternative pricing schemes. None of the opinions canvassed the relationship between consumer possession of information and the consumer’s ability to use that information to make informed choices. The relationship between the accessibility of information and the consumer’s ability to make informed decisions is a core ele-

111. *Id.* at 1177.

112. *Id.* (“We fail to see how a law that keeps truthful price information from customers increases the accuracy of information in the marketplace.”).

113. *Id.* at 1177–78 (citing *Rubin v. Coors Brewing Co.*, 514 U.S. 476, 489 (1995)).

114. *Id.* at 1178.

115. *Id.*

116. *See, e.g.*, MINN. STAT. § 325G.051(1)(a) (2018).

117. *Italian Colors*, 878 F.3d at 1178.

118. *Rowell v. Pettijohn*, 137 S. Ct. 1431 (2017).

119. *Dana’s R.R. Supply v. Att’y Gen.*, 807 F.3d 1235 (11th Cir. 2015), *cert. denied*, 137 S. Ct. 1452 (2017).

ment of the commercial speech doctrine articulated in *Virginia Citizens*.

Second, the challenged statutory provisions uniformly targeted surcharges while treating other forms of price signaling differently. California's regime was the most consumer-friendly and held violators liable for treble damages, plus cardholders' attorneys' fees and costs.¹²⁰ In New York, the penalty was a maximum fine of \$100, up to one year in jail, or both.¹²¹ In Florida, violators faced a maximum fine of \$500 or up to 60 days in jail.¹²² As the least consumer-friendly jurisdiction, Texas law foreclosed any private right of action against parties in breach of the statute and vested the state regulatory body with enforcement power.¹²³

Finally, state-level agencies in all four affected jurisdictions preserved their right to impose surcharges where credit cards were used to pay for services. None of the states could explain how statutes that preserved surcharge restrictions for credit card use at a government office served public interest while such restrictions for card use at a local grocery store did not. While the public may not share consensus on consumer marketplace options, almost every member of the public over a certain age must periodically engage in fee-based government services. Whether states intended to consciously prioritize public transaction-cost reduction over private transaction-cost reduction in credit card use regulation is unclear. The relationship between the government and private financial institutions, however, is worth noting.

Governments have a complicated and co-dependent relationship with society's financial institutions. Governments, for example, are essential actors in facilitating the collection and disbursement of funds. The government must also regulate legal transactions and criminalize illicit transactions. The government gives effect to international economic sanctions and generally aids national monetary policy as a whole. Private financial institutions also play important roles in our society. Private-sector financial institutions assist in the execution of critical state functions while supporting capital markets. Private financial institutions also issue loans to businesses of every size and provide the range of banking services most consumers require over the course of their lives. While the roles of the government and private financial actors are

120. CAL. CIV. CODE § 1748.1(b) (West 2018).

121. N.Y. GEN. BUS. LAW § 518 (McKinney 2018).

122. FLA. STAT. §§ 501.0117(1), 501.0117(2) (2018).

123. TEX. FIN. CODE ANN. §§ 339.001(c), (e) (redesignated at TEX. BUS. & COM. CODE ANN. § 604A.0021 (West 2018)).

labeled differently, the roles interact significantly. The financial industry's omnipresence endows it with unique standing in the modern economy. Industry constituents often conscript the power of public law in pursuit of commercial gain. Judicial decisions that consider surcharge-fee bans in light of the First Amendment offer a hint of the special arrangements between law, government, and private financial institutions. The judicial decisions are elucidating because they fail to reveal any credible consumer protection concerns. The judicial decisions discussed above appear to support the inference that the challenged statutes were simply fruits of successful lobbying. As the following section demonstrates, the successful lobbying arguably legalized private financial industry influence on consumer choice through behavioral theory.

III. THE COMMERCIAL PRAXIS OF USING BEHAVIORAL THEORY ALONGSIDE PRIVATE AND PUBLIC LAW

Knowledge is power. Those with power and those without power experience information sharing in a marketplace defined by the uneven distribution of resources differently. Merchant restraints rest, in part, on public and private law to control data distribution for the sake of commercial gain. Merchant restraints also exploit human cognitive research in various decisional contexts and therefore complicate how we understand the exercise of choice in terms of market participation. The Ninth Circuit was the only appellate court to recognize how lenders use the marriage between law and cognitive science to use price signaling as an intentional commercial practice.¹²⁴ This Part discusses how behavioral theory and highly refined underwriting practices operate within payment structures. This Part aims to demonstrate that the combination serves to (1) segment cardholders across different classes to allocate product-based privileges; (2) exploit socioeconomic differences by profitably matching cardholder terms with repayment patterns associated with affluence or poverty; and (3) effectively reinforce points (1) and (2) within card networks by using interchange fees and network rules to complicate the autonomous exercise of consumer choice at the expense of poor people. Legislative actions such as those promoting surcharge bans, the removal of usury caps, and the elimination of barriers to bank expansion combine with private ordering to support the three economic functions described above.

124. *Italian Colors Rest. v. Becerra*, 878 F.3d 1165, 1169 (9th Cir. 2018).

It is important to note that demand for cards continues to increase against the backdrop of public and private processes that exploit poorer consumers. In 2016, Americans used debit and credit cards to complete more than 102 billion consumer transactions, with credit cards being the third most common payment choice.¹²⁵ In the same year, Americans used credit, debit, prepaid, and Electronic Benefit Transfers (EBT) cards to complete 115 billion transactions. The 2016 data represent a 105 percent increase in volume since 2005.¹²⁶

Premium card product promotion as a sign of upward mobility has been an effective method for increasing popular credit card use. While online and mobile commerce continue to reinforce the demand for convenient, card-based retail payments, issuer banks have successfully promoted credit cards as a socioeconomic status symbol. As consumers aspire to mimic lifestyles portrayed in popular culture, consumers are subtly encouraged to treat cards as a prosperity marker. In fact, *not* having a credit card commonly elicits bemusement and can be its own source of stigma. Because issuers bundle cards with programs affiliated with airlines, hotels, rental car companies, and upscale department stores, issuers tend to attract affluent consumers. Reward-based card usage, however, incurs higher processing costs than non-reward cards. Rewards cards represent a drain on merchants because the rewards system continues to expand without a commensurate increase in the number or volume of transactions.¹²⁷

The expanding presence of reward-based credit cards marks a point of diverging interests between merchants and less affluent consumers. Larger merchants, however, have a compelling commercial motive for using antitrust litigation against reward-based card systems. Antitrust litigation could secure a windfall reduction in the cost of processing cashless payments while still supporting high sales traffic in a market defined by continuously expanding card use. Poorer cardholders and merchants may have divergent interests in limiting rewards-based cards because a reduction in rewards-based cards does not necessarily translate into lower prices. Indeed, legitimate complaints about the apparent unfairness of payment card rules are not presumably aligned with the priorities of poorer consumers. Winning antitrust claims in court may only

125. 2017 *Merchant Card Fees*, *supra* note 26.

126. *Id.*

127. See generally Andrew Ching & Fumiko Hayashi, *Payment Card Rewards Programs and Consumer Payment Choice*, 38 J. BANKING & FIN. 1773 (2010).

widen profit margins without any corresponding change in the prices consumers pay for goods or services.

A. *Targeting the Poor as a Profit Center*

Independent of merchants' litigation posture, card network rules ensure poorer consumers support their affluent counterparts regardless of payment method. Card network rules and merchant restraints are only two of the industry practices that exacerbate the economic marginalization of the poor. Another way the credit card industry economically marginalizes the poor is through exploiting the fact that poor people are more likely to use cards to meet basic needs. Poor people are more likely to use cards for basic needs when they would not otherwise have the resources to pay for those needs. Thus, poor people are more susceptible to industry practices that depend on consumer debt. Poorer populations also occupy a segment of the card-user market where consumers are most sensitive to price and, by extension, psychologically exploitative tactics.

One might expect that high levels of consumer debt would worry lenders.¹²⁸ Transactional paradigms and lending practices, however, operate conjointly because they capture revenue from both interest on outstanding balances and late fees. Consider that top-tier borrowers who pay off their monthly balances generate limited fee-based revenues. Fee-based revenues are related to the transactions themselves and place the financial burden on merchants at the point of sale. Subsistence borrowers, on the other hand, incur fees for late payments and cash advances, as well as interest on revolving balances. The fee-based revenue from top-tier borrowers coupled with profits on interest, late fees, and cash advances from subsistence borrowers leave lenders quite comfortable with high levels of consumer debt.

The above observations about profits relating to top-tier versus subsistence borrowers are consistent with the results of a recent study published by the Consumer Financial Protection Bureau (CFPB).¹²⁹ The CFPB study is relevant to understanding lender comfortability with high consumer debt because credit records indicate borrowers' credit scores. Credit scores as contained in credit records are a common underwriting and sorting tool lenders use to determine consumer eligibility for particular classes of credit card products.

128. See, e.g., Oren Bar-Gill, *Seduction by Plastic*, 98 NW. U. L. REV. 1373, 1373–74 (2004) [hereinafter Bar-Grill, *Seduction*].

129. See CONSUMER FIN. PROT. BUREAU, *THE CONSUMER CREDIT CARD MARKET* (2017) [hereinafter CFPB], <https://bit.ly/2o0bTJj> [<https://perma.cc/RP4K-HKTC>].

Lenders also use credit scores as a proxy for locating subsistence borrowers who use credit cards to meet basic needs. In short, consumer credit scores are strong indications for which consumers are likely to become profitably delinquent.

In the study, the CFPB purchased and analyzed a 1-in-48 longitudinal sample of de-identified credit records from one of the national credit reporting agencies. The data set was a representative sample of consumers with credit records. According to the report, borrowers in the bottom two quintiles show greater increases in outstanding general-purpose debt than other consumers.¹³⁰ While increases among subprime and near-prime consumers were 21 percent and 18 percent, respectively, the increase reached 38 percent for deep-subprime borrowers.¹³¹ Per-consumer credit card debt for all cardholding consumers increased nine percent since the second quarter of 2015.¹³² Average balances for consumers with lower credit scores, however, increased substantially more. In fact, the deep-subprime credit score tier experienced average balance increases by 26 percent over the same time period.¹³³

The CFPB's data support the inference that a relatively small number of consumers who use credit cards to meet basic needs are ripe targets for exploitation. Of course, the inference largely depends on the trajectory of a consumer's social mobility relative to the consumer's ability to obtain a credit card. If, for example, a consumer obtains a credit card prior to job loss, medical emergencies, or other financially significant events, the consumer may enjoy card benefits no longer commensurate with their deteriorating economic situation. Conversely, a credit-seeker already living in poverty with severely limited income occupies a different place within the credit card market if the credit-seeker's application is already approved. Nonetheless, poorer consumers in the bottom two quintiles are more likely to be delinquent debtors who sustain card usage patterns profitable to payment networks.¹³⁴

Among the six largest card issuers, five reported that interest charges accounted for 69 to 71 percent of their income between 2003 and 2005.¹³⁵ More recent data indicates that banks continue

130. *Id.* at 42.

131. *Id.*

132. *Id.*

133. *Id.*

134. See, e.g., MANN, CHARGING AHEAD, *supra* note 10, at 201–02; Joseph B. Cahill, *Where It's Due: Credit Companies Find Tough Rival at Bottom of Consumer Market*, WALL ST. J., Dec. 29, 1998, at A1.

135. U.S. GOV'T ACCOUNTABILITY OFFICE, CREDIT CARDS: INCREASED COMPLEXITY IN RATES AND FEES HEIGHTENS NEED FOR MORE EFFECTIVE DIS-

targeting the poor as an intentional business strategy.¹³⁶ Banks are anxious to preserve interest charge revenues, and Clinton-era banking deregulation coupled with the elimination of usury statutes allow them to.¹³⁷ Highly refined underwriting practices enable banks to predict which consumers are likely to become profitably delinquent.¹³⁸ Cards with low limits and high fees—called “fee harvesters”—are commonly marketed to low-income communities, often through the mass mailing of pre-approved cards. Even after segmenting prospective cardholders according to risk, payment history, and overall creditworthiness at the point of application, issuers will subsequently “reprice” accounts. Issuers reprice accounts through adjusting interest rates and other so-called “teaser repayment terms” that lure new customers with less favorable terms a year or more after enrollment. Client behavior will determine at least some of the adjustments. But account-repricing practice also allows issuers to promote artificially low introductory rates by chronologically “backloading” the real costs of borrowing. The backloaded costs only take effect several months after enrollment. As part of the Dodd-Frank reforms, the CARD Act imposed limits on such deferred-cost strategies. Among other limitations, the CARD Act capped fees institutions could charge for over-the-limit borrowing and late payments.¹³⁹ Additionally, the CARD Act prohibited so-called “double cycle” billing.¹⁴⁰ Double cycle billing calculates financing charges for card-based borrowing over two billing cycles instead of one.¹⁴¹ The CARD Act’s impact, however, remains unclear. For example, in 2013, the CFPB determined that credit card interest rates increased from 16.2 percent to 18.5 percent, even though the total cost of credit fell by two percent.¹⁴² Therefore, it is unclear what aggregate impact the CARD Act has on borrowers.

CLOSURES TO CONSUMERS 69 (2006) [hereinafter GAO], <https://bit.ly/2UL6qVl> [<https://perma.cc/BVB4-ZAYH>].

136. BD. OF GOVERNORS OF THE FED. RESERVE SYS., REPORT TO THE CONGRESS ON THE PROFITABILITY OF CREDIT CARD OPERATIONS OF DEPOSITORY INSTITUTIONS (June 2016), <https://bit.ly/2PKNT7K> [<https://perma.cc/8QT5-R6JS>].

137. Gramm-Leach-Bliley Act, Pub. L. No. 106-102, 113 Stat. 1338 (codified as amended in scattered sections of 12 and 15 U.S.C.).

138. Ronald J. Mann, *Patterns of Credit Card Use Among Low and Moderate Income Households*, in INSUFFICIENT FUNDS: SAVINGS, ASSETS, CREDIT, AND BANKING AMONG LOW-INCOME HOUSEHOLDS 252, 257 (Rebecca M. Blank & Michael S. Barr eds., 2009).

139. 12 C.F.R. § 226.52(a)(1) (2018).

140. For a useful summary of the CARD Act’s impact on risk-based pricing practices, see Bar-Gill & Bubb, *supra* note 9, at 986–1001.

141. *Id.*

142. CONSUMER FIN. PROT. BUREAU, CARD ACT REPORT 70–76 (Oct. 1, 2013), <https://bit.ly/2Eus7Dd> [<https://perma.cc/FXN2-RKV4>].

Poverty is expensive. Poverty's multifaceted elements seem to exert themselves on disadvantaged populations—disproportionately represented by people of color—with cruel synchronicity. People living in low-income neighborhoods face myriad problems associated with economic marginalization. Issues like substandard housing, limited access to affordable goods and services, underfunded public infrastructure, high crime, and suboptimal health outcomes combine to make life more expensive. Not only is each problem expensive, but the combination of the problems increases the cost of meeting basic needs. When financial emergencies arise, recourse through obtaining personal loans from banks, borrowing from similarly distressed family and friends, or seeking additional social welfare benefits may be either unavailable or limited. Credit cards as a short-term option to meet basic financial needs offer a degree of convenience and dignity other financial pathways cannot provide. But credit card use is not without its costs. The costs associated with credit card use for poor people warrant a discussion about the psychology of choosing from a range of bad choices in times of economic distress.

B. Mapping the Confluence of Behavioral Theories

What motivates an individual's choice of payment? How has the mix of public law and private network rules interacted with consumer inclinations within and across borrower segments? As scholars, we must delicately navigate the tension between two narratives. One narrative endorses perceptions of poor people as inherently lacking self-control or financial discipline. The narrative archetypes poor people as lacking sufficient regard for the social, economic, racial, and other forces that trap people in contexts where they need to spend more than they can earn. The other narrative rejects the archetype that poor people inherently lack self-control and financial discipline. Instead, the other narrative considers systemic financial practices that prey on poor people. Those who adhere to the second narrative advocate for legislative restraints on card issuers. The narrative for legislative restraint, however, fails to consider the legitimate arguments in favor of making credit available to the poor.¹⁴³

143. For examples of calls for reviving usury caps, see Vincent D. Rougeau, *Rediscovering Usury: An Argument for Legal Controls on Credit Card Interest Rates*, 67 U. COLO. L. REV. 1, 3 (1996); Elizabeth Warren, *The New Economics of the American Family*, 12 AM. BANKR. INST. L. REV. 1, 38–39 (2004). For a discussion that cautions against harming risky borrowers by setting usury rates too high

Writings in these two fields continue to borrow from behavioral economics. Behavioral economics is premised on the notion that people make irrational decisions in important decisional contexts.¹⁴⁴ The irrational decisions can be myopic and impulsive, where the decision-maker gives undue weight to immediate wants that, if acted upon, can harm the decision-maker's long-term interests. Irrational optimism, incorrect predictions of the achievability of desired results, overeating, and procrastination are some examples of behavioral patterns that persist in the face of logical alternatives.

Society traditionally bifurcates its response to such human frailties. One response is to constrain the freedom of powerful actors from exploiting irrational behavioral patterns. The other response is to defer to free market powers, where competition incentivizes businesses to exploit and monetize behavioral inclinations. Credit card use fits neatly within this paradigm precisely because consumers must weigh credit card use against consumers' inclination to obtain and use credit cards in dysfunctional ways. In light of some of the risks associated with behavioral economics, some card issuers include a customer's credit score in the customer's monthly bill and include information about interpreting credit score information. In theory, the additional information allows consumers to establish a logical nexus between card usage and creditworthiness. The monthly bill also indicates, however, the consumer's remaining credit available for further spending. Information about additionally available credit may completely undo any warning that the consumer might have registered with the credit score information because of behavioral economic implications. For example, the information about additional available credit may come at a time when the cardholder is disposed to making near-term purchases at the expense of harming the consumer's longer-term financial well-being.

The exploitation of buyers' behavioral inclinations in an effort to sell goods and services is a timeless marketing strategy. When successful, card industry promotional practices concurrently exert pressure on transactional and lending spaces. Card industry promotional practices expand the presence of expensive reward programs. Card issuers service the expensive reward programs through reve-

or too low, see David A. Skeel, Jr., *Bankruptcy's Home Economics*, 12 AM. BANKR. INST. L. REV. 43, 52 (2004).

144. For an excellent discussion about the broadening presence of behavioral economics in law, see Cass R. Sunstein, *The Storrs Lectures: Behavioral Economics and Paternalism*, 122 YALE L.J. 1826, 1832 (2013).

nue streams from rigidly enforced interchange fee structures as well as from less affluent borrowers most likely to pay late fees and interest on revolving balances. The commercial ethos built on using the less affluent to finance affluent purchaser programs is carefully designed around theories of behavioral economics.

The theory of hyperbolic discounting offers a useful framework for explaining why borrowers enroll in credit card programs they ought to avoid.¹⁴⁵ The theory begins with someone who would rather receive \$5 now instead of \$10 in 90 days. The immediacy of receiving less now outweighs the value of higher payment later. If, on the other hand, one had a choice of receiving \$35 today and \$70 tomorrow, waiting a day might seem rational. Two counterintuitive aspects underlie the cognitive bias for immediate payment. First, the importance of the extra \$35 diminishes as the delay gap between immediate and deferred payment widens. The importance diminishes even though the value of the latter payment remains constant. Second, the devaluing effect of time diminishes after a certain time threshold, such that most are likely to accept \$70 in five years rather than \$35 in four years. The hyperbolic pattern of recipient bias towards discounting and time passage earns the theory its name. Hyperbolic discounting is not entirely rational, but it reflects how calculating immediacy and delay informs our financial decisions. Most people understand that using a credit card to spend \$1,000 and making minimum payments on that balance will take 106 months to pay off at 15 percent interest. Somewhere in the recesses of their minds, they also anticipate retiring the debt will cost more. But hyperbolic discounting functions like short-term tunnel vision. Hyperbolic discounting allows the consumer to see only the near-term benefit as divorced from the costs of servicing the debt further into the future. Hyperbolic discounting in terms of debt servicing is a form of underestimation bias, or the inclination to underestimate financial burdens associated with servicing debts over time.¹⁴⁶

Behavioral psychology also informs the design of existing surcharge prohibitions in states where surcharge prohibitions remain. While the distinction between a discount and a surcharge may seem nonsensical, the framing effect suggests something different: surcharges beyond the retail price are more likely to deter credit card use than a discounted price is to encourage cash payment.¹⁴⁷ The theory is premised on the notion that framing a price

145. See Bar-Gill, *Seduction*, *supra* note 128, at 1395–1400.

146. Bar-Gill & Bubba, *supra* note 9, at 976.

147. Levitin, *Antitrust Super Bowl*, *supra* note 7, at 280.

difference as a discount elicits less negative reaction than imposing an additional fee.

Card networks owe their current structure and functions not to network effects but to the regulations in place at the time of card network inception. While a large swath of cardholders benefit from the reallocation of operating costs, such arrangements support pricing regimes that harm merchants as well as consumers living in poverty. Issuer markets complement the inequities by segmenting consumers and promoting products that card issuers perceive to match anticipated spending patterns within each respective subset of cardholders. The network and market strategies harness behavioral psychology and marshal its effects against the public. The poor are most notably harmed by strategies that employ behavioral psychology because poor people face socioeconomic challenges that make debt servicing difficult and, therefore, commercially lucrative. Conscripted into silence by contract and, in the most populated markets, statutes, merchants cannot adjust to the card industry's economic arrangements that use the same behaviorally informed strategies trained on their customers. Nor can merchants give consumers the information needed to make adjustments for themselves at point of sale, which is when consumers often make most payment choices.

Nevertheless, card networks' coercive rent-seeking power ensures merchants will continue accepting cards. Our capitalist and spending-obsessed society is unlikely to grow out of credit cards any time soon. Merchants otherwise tend to prefer card payment because consumers tend to spend more when paying with cards as opposed to cash or checks.¹⁴⁸ Further, the latter payments carry risks of theft, forgery, or alteration. Merchants also have the option of bundling payment capture programs with invoicing, scheduling, and other services of particular value to smaller businesses. As segments of cardholders continue to cluster around more expensive card products, merchants must weigh the costs of accommodating consumer preferences against other economic benefits. Until recently, the card industry has successfully preserved the more controversial merchant restraints throughout most U.S. markets by lobbying for anti-surcharge statutes in several states, including California, New York, and Texas. Significantly, the populations in these jurisdictions account for roughly half of all Americans. Therefore, it should not be surprising that these jurisdictions would be the first to see First Amendment challenges to surcharge regulations.

148. *Id.*

IV. COMMERCIAL LAW'S AMORAL RELATIONSHIP WITH RACE AS AN ANTECEDENT TO TECHNOLOGICAL REDLINING

This Part explores how algorithmic lending models obscure impermissible forms of racial bias in the credit card industry. It also considers how network effects, pricing psychology, surcharges, and algorithms combine to lure consumers into problematic arrangements that fall outside the normative construction of network effects. This Part examines how the combination harms economically marginalized populations. This Part also links structural racism's historical precursors to present-day technologies, which may produce new forms of racially problematic lending practices. Further, present-day technologies make disentangling racially problematic lending practices from the legitimate identification of high-risk borrowers more difficult.

A. *A Brief History of Race and Lending*

Commercial law has historically supported profit-making potential, even in the face of moral hazards. The support for profit is evident in the history of credit availability as an essential ingredient in expanding America's domestic economy. Some of today's largest banking institutions acknowledge economic and historical ties to slavery for their success. The banks directly engaged financially with slavery from the colonial period to the period immediately after the Civil War. Indeed, after the Civil War, courts had to adjudicate claims seeking to enforce debt secured by human collateral.

Banks were not passive actors in commercial arrangements formed around the enslavement of human beings. A study published in 2010 demonstrated, through studying 8,840 mortgages recorded in the 18th and 19th centuries, that banks and smaller creditors accepted a showing of slave ownership to secure loans.¹⁴⁹ More recently, J.P. Morgan issued a January 2005 statement admitting its predecessor entities—Citizens Bank and Canal Bank in Louisiana—“accepted approximately 13,000 slaves as collateral for loans and ended up owning approximately 1,250 of them as a result of defaults.”¹⁵⁰ Six months later, Wachovia Bank reported that two institutions it acquired—Georgia Railroad and Banking Company and the Bank of Charleston—also owned slaves.¹⁵¹

149. Bonnie Martin, *Slavery's Invisible Engine: Mortgaging Human Property*, 76 J. SOUTHERN HIST. 817, 818 (2010).

150. Katie Benner, *Wachovia Apologizes for Slavery Ties*, CNN MONEY (June 2, 2005), <https://cnmmon.ie/2PHVGmU> [<https://perma.cc/QK5F-E8BN>].

151. *Id.*

Relative to other forms of collateral, slaves were qualitatively distinct, not merely as human property, but because they were considered mobile, liquid, and therefore more saleable than land. *Bank of Kentucky v. Vance's Administrators*,¹⁵² a case involving two creditors with competing security interests in the same item of collateral, offers a useful illustration.¹⁵³ But for the human collateral, the case's facts would be standard reading for law students learning about attachment, perfection, and the determination of creditor priority when those creditors have secured interests in the same items of collateral. Two debtors, A. Morehead and Robert Latham, secured a loan with land and slaves.¹⁵⁴ Two years later, a man known only as Vance endorsed a bill of exchange drawn by the same pair of debtors.¹⁵⁵ Vance secured the bill of exchange with the same slaves previously mortgaged to the Bank of Kentucky.¹⁵⁶ After years of repeatedly renewing the loans and struggling to meet payment obligations, both creditors seized and sold the debtors' slaves.¹⁵⁷ Both creditors sued, each alleging a superior security interest in the slaves.¹⁵⁸ Although the Bank of Kentucky prevailed,¹⁵⁹ the litigation posture reveals a more important narrative about slaves' value. Although the bank had different kinds of collateral, the slaves were Vance's *only* collateral.¹⁶⁰ Vance argued the bank should dispose of other assets to enforce its collection rights.¹⁶¹ The court disagreed, holding that the bank, as superior lienholder, could prioritize disposition of its collateral as it saw fit.¹⁶²

Legal uncertainty in the years immediately following emancipation clouded the legal standing of transactions premised on slave ownership. Uncertainty grew because the law no longer deemed former slaves as property. Nonetheless, banks remained keen to enforce loans secured by slaves in the period between emancipation and 1871. In 1871, the Supreme Court settled the question of whether such obligations were enforceable following passage of the Thirteenth Amendment, which William Henry Seward proclaimed

152. *Bank of Ky. v. Vance's Adm'rs*, 14 Ky. 168 (1823).

153. *Id.*

154. *Id.* at 169.

155. *Id.*

156. *Id.* at 169–70.

157. *Id.* at 170.

158. *Id.* at 170–71.

159. *Id.* at 172.

160. *Id.* at 173–74.

161. *Id.* at 175.

162. *See Bank of Ky.*, 14 Ky. at 168.

into force in 1865.¹⁶³ The Civil War's somewhat unorganized conclusion further contributed to the legal uncertainty. The Civil War concluded without any compensation schemes to address slave emancipation's commercial consequences. More specifically, there was no mechanism to clarify the enforceability of negotiable instruments previously secured with human collateral. Such compensation schemes were possible and followed abolition in countries like Barbados, Brazil, South Africa, or elsewhere.¹⁶⁴ In America, however, the financial disorganization of the Civil War's conclusion and emancipation created a quagmire that set the stage for systemic financial subjugation of blacks.

The post-war reconstruction period eventually gave way to Jim Crow laws, which intentionally limited the economic ascendance of black communities. A variety of financial regulations and practices operated in concert to control the allocation of wealth, pathways to upward economic mobility, and meaningful political participation. For example, banking practices, which were often enforced with violence, cemented into place a set of enduring institutional norms that reached into every aspect of public and private life. Black Codes¹⁶⁵ kept African-Americans in segregated schools, barred enrollment in colleges and universities, severely restricted entry into various occupations, and controlled freedom of movement. The Department of Agriculture systemically denied black farmers equal access its loan programs, which allowed their white counterparts to further prosper.¹⁶⁶ Under the Serviceman's Readjustment Act of 1944, commonly known as the "GI Bill," financial institutions denied various forms of financial assistance for African-American soldiers returning from serving overseas. For example, when returning African-American soldiers sought funding to attend college

163. *White v. Hart*, 80 U.S. 646 (1871); see *Wainwright v. Bridges*, 19 La. Ann. 234 (1867); see also *New Orleans Canal & Banking Co. v. Templeton*, 20 La. Ann. 141 (1868).

164. There were limited exceptions, such as legislative schemes permitting compensation for former slave owners in the District of Columbia. See Act of April 16, 1862, ch. 54, §§ 2–3, 12 Stat. 376.

165. Black Codes were laws passed by state legislatures that sought to control and inhibit the freedom of ex-slaves following the passage of the Thirteenth Amendment. See Isaac Saidel-Goley & Joseph William Singer, *Things Invisible to See: State Action and Private Property*, 5 TEX. A&M L. REV. 439, 447–48 (2018) (“The Black Codes blatantly circumvented the Thirteenth Amendment by attempting to restore slavery in all but name.”).

166. See Jim Chen, *Of Agriculture's First Disobedience and Its Fruit*, 48 VAND. L. REV. 1261, 1306 (1995); Andrea Freeman, *The 2014 Farm Bill: Farm Subsidies and Food Oppression*, 38 SEATTLE U. L. REV. 1271, 1277 n.32 (2015).

or for other programs under the GI Bill, the government administrative agencies routinely denied their requests.¹⁶⁷

Notably, the structures that limited black communities were qualitatively distinct from those limiting Asian and European immigrant populations.¹⁶⁸ For example, government-endorsed financial policies resulted in “the [city] ghettos that initially trapped America’s other immigrant groups [to] eventually improve themselves out of existence.”¹⁶⁹ The other immigrant groups relocated to suburbs where African-Americans were excluded through violence, zoning restrictions, and racially restrictive covenants.¹⁷⁰ With extensive government support, lending institutions often participated in the exclusion of blacks from moving out of ghettos. Lending institutions either actively cooperated with redlining to deny consumer and commercial loans to members of predominantly black inner-city neighborhoods, or resorted to reverse redlining.¹⁷¹ Reverse redlining occurs when lending institutions target the same populations otherwise subject to redlining with less desirable loan products.¹⁷² Additionally, the onset of credit scoring in the 1950s amplified the effect of carefully engineered racial disparities. Credit scores exacerbated racial disparities in unequal housing, employment, pay, education, and health because it uses these and similarly racially stratified metrics to determine creditworthiness. Today, highly sophisticated technologies join credit scoring to capture vast amounts of transactional data. Financial institutions use the transactional data in underwriting and racially targeted marketing. Smartphones, mobile Internet access, location technologies, digital wallets, and census data now aid in data harvesting, which has transformed banking institutions into technocapitalist entities.¹⁷³

167. Servicemen’s Readjustment Act of 1944, Pub. L. No. 78-346, 58 Stat. 284. For an excellent history on the unequal treatment of African-American soldiers after the World War II, see Sarah Turner & John Bound, *Closing the Gap or Widening the Divide: The Effects of the G.I. Bill and World War II on the Educational Outcomes of Black Americans*, 63 J. ECON. HIST. 145, 145–77 (2003).

168. For a discussion of how immigrant groups fared relative to African-American communities from the turn of the 20th century, see MEHRSA BARADARAN, *THE COLOR OF MONEY: BLACK BANKS AND THE RACIAL WEALTH GAP* 6 (2017).

169. BARADARAN, *supra* note 168, at 6.

170. *Id.*

171. *Id.*

172. *Id.*

173. “*Technocapitalism* is an emerging form of market capitalism, rooted in invention and the development of new technologies.” Luis Suarez-Villa, *The Rise of Technocapitalism*, 14 SCI. STUD., no. 2, 2001, at 4, 4.

From colonial times to the present, those who have white supremacist sentiments employ various paradigms to support racialized disparate treatment. For example, 19th century white supremacist apologists look to eugenics for philosophical and pseudo-scientific support.¹⁷⁴ More recently, 20th century economic theories that disfavor government intervention provide cover for maintaining racialized wealth gaps. Economic theories that frown upon government wealth redistribution invoke arguments for minimizing any role state power might play in corrective programs. The same economic theories, however, overlook the legacy of heavy government involvement that entrenched the economic and political subordination of racial minorities. The government's involvement did not simply undermine the economic advancement of black communities. Government-sanctioned racial subordination furthers institutional racism's primary function: to compound existing advantages already afforded white communities.

B. *The Strengths and Limits of Algorithmic Lending*

Algorithms are capable of widening the sweep of information that marketing and underwriting processes use to determine creditworthiness. An algorithm is a computerized procedure or formula used to solve one or more problems. Algorithms, however, also tend to reflect the biases of software engineers who design them. Software applications, like Microsoft Excel, contain examples of basic algorithms. Such software applications use limited instructions to streamline the generation of predictable outcomes that might take longer manually. Aside from basic algorithms, software engineers have developed much more sophisticated *learning algorithms*. Learning algorithms learn on their own and are often based

174. Eugenics is premised on the theory that human shortcomings were hereditary. It posits that humanity's best hope for survival is to promote reproduction among society's healthiest and most productive members. Conversely, it seeks to discourage those deemed less fit from reproducing. American eugenicists used this theory to develop a cross-disciplinary pseudo-science with a view to pursuing laws that would mandate social ordering along racial lines. For a discussion of eugenics generally, see DANIEL J. KEVLES, *IN THE NAME OF EUGENICS* (1985); MARK H. HALLER, *EUGENICS: HEREDITARIAN ATTITUDES IN AMERICAN THOUGHT* (1984); ALLAN CHASE, *THE LEGACY OF MALTHUS* (1977); KENNETH LUDMERER, *GENETICS AND AMERICAN SOCIETY* (1972). This theoretical system extended beyond the sorts of anti-miscegenation laws at issue in the landmark *Loving v. Virginia* ruling, but also in a broader policymaking sense. See Paul A. Lombardo, *Miscegenation, Eugenics, and Racism: Historical Footnotes to Loving v. Virginia*, 21 U.C. DAVIS L. REV. 421 (1988); Melanie Fong & Larry O. Johnson, *The Eugenics Movement: Some Insight into the Institutionalization of Racism*, ISSUES CRIMINOLOGY, Fall 1974, at 89, 99–100.

on a combination of initial instructions and subsequent human input.

Consumers experience learning algorithms when they visit a retailer's website, search for a specific item, and are directed to a range of other products based on their past purchasing histories. Based on a learning algorithm, the website may also direct the site visitor to the purchasing histories of other customers who bought the same item. Social media sites use similar algorithms to suggest content about a destination city's attractions after users search for or travel to new places. Algorithmic processes often work in tandem with *Big Data*. Big Data is a shorthand label referring to vast data sets computationally analyzed to discern a wide range of human behaviors.

There has been extensive commentary in academia and the popular press about algorithms' effect on inequality.¹⁷⁵ A recent controversy involving the online retailer Amazon is instructive. In April 2016, Bloomberg reported that Amazon Prime same-day delivery service was not available in large portions of predominantly African-American zip codes.¹⁷⁶ The pattern replicated in six major cities where this program was otherwise available.¹⁷⁷ According to the report, black citizens in Atlanta, Chicago, Dallas, and Washington, D.C. were "about half as likely to live in neighborhoods with access to Amazon same-day delivery as white residents."¹⁷⁸ For example, in New York City, same-day service largely excluded the Bronx, a predominantly minority borough.¹⁷⁹ A similar pattern emerged in Boston's predominantly black Roxbury neighborhood, where Amazon Prime member residents could not get same-day delivery that was available elsewhere in the city.¹⁸⁰ Predictably, Amazon's vice president for global communications denied that race factored in the implementation of its same-day service.¹⁸¹ The same-day rollout prioritized zip codes, he said, with high concentra-

175. See, e.g., Julia Angwin et al., *Machine Bias*, PROPUBLICA (May 23, 2016), <https://bit.ly/2Conr0r> [<https://perma.cc/TQ3W-AZDB>]; Will Knight, *Biased Algorithms Are Everywhere, and No One Seems to Care*, MIT TECH. REV. (July 12, 2017), <https://bit.ly/2R2QsqH> [<https://perma.cc/ZJ4S-5DCJ>].

176. David Ingold & Spencer Soper, *Amazon Doesn't Consider the Race of Its Customers. Should It?*, BLOOMBERG (Apr. 21, 2016), <https://bloom.bg/2koKDjQ> [<https://perma.cc/VR6F-FET3>]. The Amazon Prime program charges enrollees a fee in exchange for benefits, such as free same-day delivery, not available to other customers.

177. Ingold & Soper, *supra* note 176.

178. *Id.*

179. *Id.*

180. *Id.*

181. *See id.*

tions of Prime members.¹⁸² While the vice president's assertions may be true, such data-driven strategies reinforce the effect of pre-existing inequalities in cities where prioritized zip codes consisted of predominantly white residents. Was this a case of "algorithmic redlining" learned by the retailer's information systems, or was it a natural consequence of software engineers failing to account for racism's legacy in prioritizing the rollout of new services? Is there a way to infuse algorithmic processes with equity-based parameters that do not otherwise undermine their broader functional utility?

The advent of algorithms and other complex technologies echo the historical marriage between white supremacy and socially legitimizing frameworks in ways that make the old seem new. Like 19th century scientists, today's software engineers enjoy the presumption that their systemically important work generates an output entirely free of frailties commonly associated with humans. Indeed, there is some literature suggesting algorithms can use non-traditional lending criteria to increase access to credit¹⁸³ and identify "credit invisibles" or creditworthy borrowers that traditional lenders often overlook.¹⁸⁴ But software engineers are humans, and their biases slip into their work product. Software-engineer bias shapes the logic of automated decision-making.¹⁸⁵ Tech workers are like other professionals whose members do not unanimously share the same values. A difference in values can lead to conflict in an arena where highly problematic views of minorities become atomized, normative, and deployed across cyberspace.

One example of conflict in the tech industry based on divergent ideologies is that of James Damore. In April 2017, Damore, a software engineer at Google, sparked controversy after writing an infamous memo decrying his employer's diversity initiatives.¹⁸⁶ Titled *Google's Ideological Echo Chamber*, the short memo argued that initiatives seeking to diversify his field were misaligned with what he described as biological differences predisposing men to be-

182. *Id.*

183. See Mikella Hurley & Julius Adebayo, *Credit Scoring in the Era of Big Data*, 18 YALE J.L. & TECH. 148, 155–59 (2016).

184. See CONSUMER FIN. PROT. BUREAU, DATA POINT: CREDIT INVISIBLES (May 2015), <https://bit.ly/2EBa2UT> [<https://perma.cc/QQ2D-PXGE>] (using the term "credit invisibles" to describe the 26 million Americans with no credit history or the additional 19 million whose credit cannot be scored because their histories are limited or too old).

185. See SAFIYA UMOJA NOBLE, ALGORITHMS OF OPPRESSION: HOW SEARCH ENGINES REINFORCE RACISM 2 (2018).

186. See James Damore, *Google's Ideological Echo Chamber* (July 2017) (unpublished manuscript), <https://bit.ly/2wCkHqk> [<https://perma.cc/6KMZ-QLM3>].

ing better in his particular work environment.¹⁸⁷ The memo went on to say, “discriminating just to increase the representation of women in tech is as misguided and biased as mandating increases for women’s representation in the homeless, work-related and violent deaths, and school dropouts.”¹⁸⁸ Leaving aside the claims’ substantive merits, Damore’s claims are telling in the breadth of social issues swept up in connection with his view of gender differences. Readers should pause to consider what software code might produce when written under the influence of a professional community with fundamentally divergent social values. One scholar argues that technology firms will find it increasingly difficult to separate their products from their workers’ harmful ideologies.¹⁸⁹ Another data analyst expressed the point differently:

When we translate cultural clichés and stereotypes into empirically verifiable datasets, we introduce subjectivity into a discipline that strives for objectivity. When we imbue our Big Data insights with our race-based biases, we project our prejudices onto subsequent observations.¹⁹⁰

Scholars who call for the prevention of algorithmic bias voice general concern about discrimination¹⁹¹ and about the importance of designing algorithms with transparent and equitable safeguards.¹⁹² Counterarguments suggest that modifying algorithms to reflect desired social norms is a form of Libertarian Paternalism. The view that algorithm modification is paternalistic is based on the premise that it serves as a vessel for future abuse by public or private actors.¹⁹³ Actors who could abuse the modifications would ar-

187. *See id.*

188. *Id.*

189. *See* NOBLE, *supra* note 185, at 127.

190. Cecilia Esther Rabess, *Can Big Data Be Racist?*, **BOLD ITALIC** (Mar. 30, 2014), <https://bit.ly/2GjU6YW> [<https://perma.cc/4UVS-T42Z>].

191. Danielle Keats Citron, *Technological Due Process*, 85 WASH. U. L. REV. 1249, 1251 (2008); *see also* Michael Schrage, *Big Data’s Dangerous New Era of Discrimination*, HARV. BUS. REV. (Jan. 29, 2014), <https://bit.ly/2pux98L> [<https://perma.cc/8GBQ-G9W2>].

192. Kate Crawford & Jason Schultz, *Big Data and Due Process: Toward a Framework to Redress Predictive Privacy Harm*, 55 B.C. L. REV. 93, 109 (2014); *see also* PASQUALE, *supra* note 8; Oscar H. Gandy, *Engaging Rational Discrimination: Exploring Reasons for Placing Regulatory Constraints on Decision Support Systems*, 12 ETHICS & INFO. TECH. 29 (2008).

193. *See* RICHARD H. THALER & CASS R. SUNSTEIN, *NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS* (2008); Richard H. Thaler & Cass R. Sunstein, *Libertarian Paternalism*, 93 AM. ECON. REV. 175 (2003); Gregory Mitchell, *Libertarian Paternalism Is an Oxymoron*, 99 NW. U. L. REV. 1245 (2005); *cf.* Richard H. Thaler & Cass R. Sunstein, *Libertarian Paternalism Is Not an Oxymoron*, 70 U. CHI. L. REV. 1159 (2003).

guably seek to constrain individual freedoms related to exercising moral choice.¹⁹⁴ But much of the debate originates from outside payment-systems scholarship, where experts must examine expanding consumer presence in the credit card arenas. A 2010 Wall Street Journal investigation describes how algorithmic lending mines Big Data and complicates efforts to detect bias.¹⁹⁵ According to the article, Capital One Financial Corp. used online marketing firm [x+1] Inc. to algorithmically profile prospective customers.¹⁹⁶ The firm captured code from users' computers who visited the issuer's website.¹⁹⁷ [x+1] captured information from a prospective borrower's computer, including their zip code, income, education, and precise location at the time of application.¹⁹⁸ [x+1] also used "behavioral databanks" to build a composite of assumptions about the users' proclivities.¹⁹⁹ [x+1] then assembled the data points and used the information to place consumers in one of 66 Nielson demographic segments.²⁰⁰ Where each consumer fell in the Nielson segments determined the card products the card issuer offered at the time of enrollment.²⁰¹

Concerns about inequity persist in the face of assurances that such practices comply with ECOA. For example, the algorithm placed a white woman in Neilson's "Young Influentials" segment of suburbanites who earn roughly \$50,000 per year.²⁰² Although it correctly determined where she lived, it underestimated her income and incorrectly assumed she might buy rap music or read *Vibe*, a hip-hop magazine.²⁰³ The woman's husband was African-American, but neither she nor her husband read *Vibe* or listened to rap

194. See sources cited *supra* note 193.

195. Emily Steel & Julia Angwin, *On the Web's Cutting Edge, Anonymity in Name Only*, WALL STREET J. (Aug. 4, 2010), <https://on.wsj.com/2EBbSFh> [<https://perma.cc/S74R-VJLF>].

196. *Id.*

197. *Id.*

198. *Id.*

199. *Id.*

200. *Id.* Known as the Nielson PRIZM (Potential Rating Index by Zip Markets) system, these demographic categories were created by Claritas, Inc. before the firm became a Nielson subsidiary in 2004 through a series of mergers and reorganizations. PRIZM uses census data, zip code clusters, and marketing surveys to classify people into segments based on location, lifestyle, "lifestage," and consumer behavior. For example, customers in Nielson's "White Picket Fence" category tended to be homeowners, parents within the ages of 24 to 44, living in small cities where the median household income was \$53,901, and employed in white-collar or service jobs.

201. *Id.*

202. *Id.*

203. *Id.*

music.²⁰⁴ The inaccurate assumptions about the woman raises questions of how such behavioral proclivities were attributed to her household and whether the flawed assumptions somehow prioritized the card products offered.²⁰⁵

Isolating sources of flawed demographic assumptions in a card industry where online enrollment and spending continue to increase is critically important.²⁰⁶ Online retail sales in the United States exceeded \$360 billion in 2016, \$409 billion in 2017, and are on track to surpass \$461 billion in 2018.²⁰⁷ In 2017, consumers executed \$2.749 trillion in ACH internet-based payments, or a 12.7 percent increase over 2016 figures.²⁰⁸ Upward trends in online purchases are unfolding in a digital climate that promotes the convenience of online payments most of us execute with little thought. Those purchases, however, feed Big Data and the sophisticated learning algorithms that support credit card issuance as well as other types of underwriting.

The language and judicial treatment of ECOA further complicate any prospect of tackling algorithmically concealed racism. The statute prohibits lenders from discriminating against credit applicants on the basis of age, religion, race, color, national origin, or their status as recipients of public benefits. ECOA contains, however, no comparable provisions to those in the Home Mortgage Disclosure Act that require lenders to disclose the race of applicants and borrowers.²⁰⁹ ECOA's lack of reporting requirements undermines access to data that regulators might use to monitor the presence of disparate impacts. The deficiency in mandatory reporting requirements also adds to judicial uncertainty as to whether discrimination claims are cognizable. The judicial uncertainty may account for the paucity of Department of Justice enforcement actions.²¹⁰ In fact, the Department did not file its first claim until 1999.²¹¹ In that case, the defendant-bank entered into a \$1.5 mil-

204. *Id.*

205. Steel & Angwin, *supra* note 195.

206. CFPB, *supra* note 129, at 11.

207. *Retail E-Commerce Sales in the United States from 2016 to 2022 (in Million U.S. Dollars)*, STATISTA, <https://bit.ly/2sMIC9R> [<https://perma.cc/3N6U-X8KJ>].

208. *ACH Payments in the U.S.—2017*, NILSON REP. (HSN Consultants, Carpinteria, Cal.), May 2018, at 12, <https://bit.ly/2RZuWQC> [<https://perma.cc/X52Y-BALD>].

209. 15 U.S.C. § 1691(a) (2018).

210. *See, e.g., Golden v. City of Columbus*, 404 F.3d 950, 963 n.11 (6th Cir. 2005).

211. *See Complaint, United States v. Assocs. Nat'l Bank*, No. 1:99-cv-00196-SLR (D. Del. filed Mar. 29, 1999), <https://bit.ly/2QEzLlK> [<https://perma.cc/B7NA->

lion settlement agreement with no acknowledgment of wrongdoing.²¹² Two subsequent claims resulted in similar outcomes.²¹³ Notably, government investigations originating from the CFPB or one of its predecessors gave rise to all three claims. The particular source of the discrimination claims reinforces the notion that consumers are less likely to discern racially problematic lending patterns. To maintain industry practice secrecy, credit card issuers support unsecured lending arrangements formed outside the purview of public recording systems. Such lending secrecy is similar to that with mortgages or other forms of secured loans. ECOA's regulatory framework constitutes a design weakness that perpetuates racial borrowing inequities because racially problematic underwriting is likely to occur in plain sight and without detection. Under ECOA, the regulatory framework is a rubric misaligned with the algorithmic terrain. The recognition that ECOA effectively discourages discrimination claims warrants turning our attention to potential impact on cardholder segmentation.

C. Algorithms, Bias, Segmentation, and Network Effects Reimagined

The analytical process to disentangle illegal treatments of race from technologically aided consumer sorting is difficult. Algorithms add to the challenge by characterizing geo-demographic data clusters as ostensibly neutral metrics that merely reflect societal preferences and tastes. A clearer picture of these preferences emerges when stripped of their neutral pretense. Nielson's 66 categories are a taxonomy, where he assigns rankings to the entire population that range from the first place "Upper Crust" segment to the last place "Low-Rise Living."²¹⁴ The labels and constituent descriptions are revealing insofar as they transmit degrees of desirability clearly traceable to structural inequality's legacy. For

RDAA] (alleging Associates National Bank of Delaware subjected Hispanic borrowers to stricter underwriting standards and less favorable terms and conditions than those applied to non-Hispanic borrowers).

212. See Settlement Agreement Between United States of America and Associates National Bank at 2, *United States v. Assocs. Nat'l Bank*, No. 1:99-cv-00196-SLR (D. Del. filed Mar. 29, 1999), <https://bit.ly/2GoAFOQ> [<https://perma.cc/BZK6-A8L8>].

213. See Settlement Agreement and Order, *United States v. Fidelity Fed. Bank*, No. 1:02-CV-02-3906 (E.D.N.Y. filed July 25, 2002), <https://bit.ly/2QZQuzz> [<https://perma.cc/JP3H-U7MW>]; see also Consent Order, *United States v. Synchro Bank*, No. 2:14-CV-00454 (D. Utah filed June 27, 2014), <https://bit.ly/2rJs92y> [<https://perma.cc/5NUG-AU76>].

214. PRIZM, SEGMENT SNAPSHOT DESCRIPTIONS, <https://bit.ly/2S7HLsj> [<https://perma.cc/9K8B-T3YP>].

example, the 65th segment, labeled “Big City Blues,” contains the following description:

With a population that’s 50 percent Latino, Big City Blues has the highest concentration of Hispanic Americans in the nation. But it’s also the multi-ethnic address for downscale Asian and African-American households occupying older inner-city apartments. Concentrated in a handful of major metros, these young singles and single-parent families face enormous challenges: low incomes, uncertain jobs and modest educations. More than 40 percent haven’t finished high school.²¹⁵

By contrast, the seventh place “Money & Brains” segment is described this way:

The residents of Money & Brains seem to have it all: high incomes, advanced degrees and sophisticated tastes to match their credentials. Many of these city-dwellers, predominantly white with a high concentration of Asian Americans, are married couples with few children who live in fashionable homes on small, manicured lots.²¹⁶

The descriptions use particular combinations of terms such as “upper-class,” “affluent,” “diverse,” or “ethnic” in ways that are not simply descriptive, but infused with value-laden assumptions:²¹⁷

[W]hen segments are combined with both racial and class perceptions, the clusters may be over-generalized, fail to account for eclectic combinations of preferences that might defy categorization. . . . [A]t the very least, clusters may be skewed by the images of ourselves that are sold to us and arguably, as a result, are coveted and absorbed.²¹⁸

Credit card issuers use technologically enabled sorting based on race and income alongside industry practices that were discussed in Part II. The combination of sorting and industry practices reinforce and complement a wider competitive, aspirational, and consumptive ethos that pressures people to improve their socioeconomic standing in relation to others. Industry practices further reinforce and complement pressures to convey impressions of class membership in a society that treats poverty as a moral failing—one often ascribed to racial minorities. When the industry en-

215. *Id.*

216. *Id.*

217. Audrey G. McFarlane, *Who Fits the Profile: Thoughts on Race, Class, Clusters, and Redevelopment*, 22 GA. ST. U. L. REV. 877, 886 (2006).

218. *Id.* at 887.

gages in technologically enabled sorting, poor racial minorities carry the financial brunt of societal pressures to avoid appearing poor.

The pressures, and thus the related costs, to avoid appearing poor are omnipresent. For example, schools routinely shame children who cannot afford to pay for their lunch in the middle of the day, despite mountains of research linking a child's nutritional intake to his or her learning outcomes.²¹⁹ Another example is the subsets of evangelical Christianity that tout the so-called "prosperity gospel." The prosperity gospel teaches Christians that God's most favored are blessed with material wealth—the inference being that the poor are disfavored.²²⁰ Yet another example is the way real estate websites use statistics about crime, school ratings, and other social markers to steer prospective homebuyers to or away from particular neighborhoods.²²¹ Law schools and other professional programs ask prospective enrollees about their prior financial history.²²² Additionally, employers will occasionally deny employment opportunities to job applicants with poor credit scores.²²³ The pressure to avoid the appearance of being poor compounds on those who incur huge debt to enter classic professions. Most bear the additional burden of buying expensive business attire out of occupational necessity, to "look the part," and to assure colleagues they "fit in." Finally, the law-enforcement system exacer-

219. See Melinda Anderson, *What Do Unpaid Lunch Tabs Mean for Schools?*, ATLANTIC (Feb. 9, 2016), <https://bit.ly/2mfnDIM> [<https://perma.cc/T4FN-BA8T>].

220. See Jacob M. Bass, *The Sermon on the Mountain of Cash: How to Curtail the Prosperity Scheme and Prevent Opportunists from Preying on Vulnerable Parishioners*, 37 B.C. J.L. & SOC. JUST. 147, 147–50 (2017) (discussing a Christian movement that believes church donations will lead to God's blessing); John Ehrett, *The Robber Baron's Revenge: Law and Theology in the Shadow of Economic Transition*, 9 NW. INTERDISC. L. REV. 47, 67 (2016) (defining prosperity gospel as a phenomenon that "draws a connection between material fortune and divine favor").

221. Sites like realtor.com allow prospective homebuyers to incorporate crime rates, school quality, the availability of private schools, zip codes, and median home values, which can also serve as proxies for race.

222. Law school applicants are routinely asked for information they must also provide to state law examiners prior to writing their bar examinations. This information often mirrors the kinds of disclosures required by the National Conference of Bar Examiners. Their sample application asks if candidates have ever had a credit card revoked outside the context of bankruptcy. See, e.g., NAT'L CONFERENCE OF BAR EXAM'RS, SAMPLE CHARACTER & FITNESS APPLICATION, <https://bit.ly/2GoUju7> [<https://perma.cc/9NMJ-AVRF>].

223. See Dona DeZube, *How Your Financial Past Can Hurt Your Job Search*, MONSTER, <https://bit.ly/2ngs995> [<https://perma.cc/BK5Y-QP9L>] (offering guidance to job applicants that may have to disclose credit and financial information to prospective employers).

bates the societal pressures to avoid the appearance of being poor. The law-enforcement system has a long history of ensnaring African-American men, removing them from the economy, and using records of prior criminal involvement to bar reentry into the workplace.

Dominant societal perceptions of poor people of color further complicate this demographic's relationship to credit card debt. The narrative that African-Americans are irresponsible spenders is a longstanding stereotype. This trope is a variant on the Victorian view that poor people are predisposed to making unwise choices. The narrative lives on in perceptions of how poor people spend their money. If they would just "make better choices," the argument goes, the poor could lift themselves out of poverty. Against the backdrop of these narratives, scholarly treatment of spending tendencies among poor people of color is mixed. While some peer-reviewed research acknowledges higher rates of consumption spending among black and Hispanic consumers than whites, the difference appears to reflect status signaling.²²⁴ The research suggests that status signaling is a pattern that disappears among lower-income earners who demonstrate the behavior equally to higher-income earners.²²⁵

African-Americans face additional pressures from certain quarters within their own communities, where expectations born of respectability politics operate to shame those considered predisposed to wasteful spending.²²⁶ In what became infamously known as the "Pound Cake Speech," comedian and actor Bill Cosby admonished segments of the black community for not living up to the ideals of the civil rights movement.²²⁷ He charged that "[t]he lower economic and lower middle economic people are not holding their end in this deal."²²⁸ He further attacked African-American naming practices, shamed single mothers, overstated high school dropout

224. See generally Kerwin Kofi Charles et al., *Conspicuous Consumption and Race*, 124 Q.J. ECON. 425 (2009).

225. *Id.*

226. Equity-seeking populations will engage in respectability politics by internally pressuring members to exhibit behaviors thought to align with those of mainstream society, as an alternative to challenging society to treat them more equitably. For a recent discussion, see Osagie K. Obasogie & Zachary Newman, *Black Lives Matter and Respectability Politics in Local News Accounts of Officer-Involved Civilian Deaths: An Early Empirical Assessment*, 2016 WIS. L. REV. 541, 543 (2016).

227. See Bill Cosby, Address at the NAACP' on the 50th Anniversary of *Brown v. Board of Education* (May 17, 2004), in AMERICANRHETORIC.COM, <https://bit.ly/2PLHbhK> [<https://perma.cc/PDB7-S7XZ>][fncs].

228. *Id.* at 1.

rates, and misrepresented levels of black incarceration.²²⁹ Critiquing black parenting practices, Cosby went on to say, “they’re buying things for the kid—\$500 sneakers—for what? They won’t buy or spend \$250 on Hooked on Phonics.”²³⁰ The ideological underpinnings of this narrative reveal longstanding class divides within the African-American community.²³¹ Cosby firmly declared himself to be in the affluent camp, reportedly waxing nostalgic about segregation’s ancillary benefits:

When restaurants, laundries, hotels, theaters, groceries, and clothing stores were segregated, black people owned and ran their own. . . . Such successes provided jobs and strength to black economic well-being. They also gave black people that gratifying sense of an interdependent community.²³²

Class and race remain closely interrelated determinants of where and how Americans live.²³³ But recent data from the Pew Research Center suggests a growing racial wealth gap among middle-class households.²³⁴ While the overall racial wealth gap shrank from 2013 to 2016, the median wealth of white households was ten times that of black households and eight times that of Hispanic households.²³⁵ Middle- and lower-income households are still recovering from the Great Recession, which halved wealth in white lower-income homes.²³⁶ Significantly, black and Hispanic middle-income households also saw a 50 percent drop in wealth.²³⁷

Pew’s data also revealed racial gaps in wealth within income groups, with white families having four times the wealth of black families in the lower- and middle-income households.²³⁸ The share of families with zero net worth or in debt reflect continued reces-

229. *Id.* at 1–2.

230. *Id.* at 2.

231. Ta-Nehisi Coates, ‘*This Is How We Lost To The White Man*’, ATLANTIC (May 2008), <https://bit.ly/2SWui6y> [<https://perma.cc/959F-2CXH>].

232. BILL COSBY & ALVIN F. POUSSAINT, COME ON, PEOPLE: ON THE PATH FROM VICTIMS TO VICTORS 37 (2007).

233. The widely documented scholarly discussion of America’s racial wealth gap is simply too vast to fully capture here. See Rakesh Kochhar & Anthony Cilluffo, *How Wealth Inequality Has Changed in the U.S. Since the Great Recession, by Race, Ethnicity and Income*, PEW RES. CTR. (Nov. 1, 2017), <https://pewrsr.ch/2z5kgY0> [<https://perma.cc/BV96-FEJP>]; MATTHEW DESMOND, EVICTED: POVERTY AND PROFIT IN THE AMERICAN CITY (2016).

234. See Kochhar & Cilluffo, *supra* note 233.

235. *Id.*

236. See *id.*

237. See *id.*

238. See *id.*

sionary stress on household finances.²³⁹ Overall, black and Hispanic families are more likely to experience zero net worth or debt related to lingering recessionary stress than white families.²⁴⁰ While the share of lower-income black and Hispanic families with zero or negative net worth decreased, it went up across the middle class.²⁴¹ Black families showed the smallest net worth increase.

Socioeconomic hierarchies drive the credit card industry's marketing, underwriting, enrollment, and contractual arrangements. The socioeconomic hierarchies produce two kinds of network effects that function concurrently to the detriment of minorities and the poor. Firstly, because merchants bear system costs and historical limits, merchants pass those costs on to consumers in the form of surcharges outside the framework of private and public law. Different borrowers have different financial capacity to refuse those surcharges. Whereas affluent customers have more economic freedom to determine whether to pay credit card surcharges at points of sale, poorer subsistence borrowers may feel compelled to pay such fees to access urgently needed debt. Subsistence borrowers' lack of choice regarding point-of-sale surcharges underwrites the first kind of socioeconomic hierarchy embedded in the normative model of network effects.

The second socioeconomic hierarchy embedded in the normative model of network effects exploits poorer borrowers to benefit wealthier borrowers. In the normative model of network effects, consumers jockey for coveted places within a stratified space where some enjoy conferral of favored status at the expense of others. Generally, wealthier consumers want to accumulate airline points, "cash back" rewards, and other perks. The wealthier consumer's interests prompt their enrollment in card programs that generate no revenue for issuers. Issuers cannot sustain these programs without capitalizing on the borrowing patterns of poorer borrowers, who are likely to carry a balance. The resultant network effect is that poorer cardholders supply the larger share of issuer-side operating costs to the benefit of their wealthier counterparts. Card networks that embrace technologies embedded with human bias may reinforce or worsen extant discriminatory practices rooted in the actuarial and behavioral sciences.

The card industry seized on the compounded effect of legal, social, and economic forces afflicting many poor people. Many poor people have anxieties that leave them especially vulnerable to

239. *See id.*

240. *See id.*

241. *See id.*

debt arrangements that temporarily sustain economic survival at the potential cost of longer-term debt. Marketing strategies tout credit cards as convenient short-term financial fixes. They facilitate hyperbolic discounting and exploit other forms of underestimation bias that lie at the heart of why payment choice is especially complicated for racial minorities. The current economy permits stereotypes to bleed into Big Data and mix with actuarial metrics. Racially problematic informational processes reside in technological landscapes and beyond reach of conventional regulation. To make informed market decisions, consumers need a regulatory framework that broadens the existing range of institutional disclosures under fair lending laws. There remains no feasible way to cast a light on the degree to which cardholders are unwittingly complicit in atomized forms of discrimination at enrollment or at points of sale when choosing cashless forms of payment.

CONCLUSION

While the ethics of enrollment practices and disputes over surcharges may seem unrelated, both coalesce around a hierarchy of cardholders. A decade ago, one scholar observed that low mortgage rates pressured lending institutions to rely on revenues from interchange fees.²⁴² As reward programs became more popular, growth in revenues from interchange fees outpaced profits from interest on unpaid credit card balances.²⁴³ Initially conceived as private contractual arrangements and reborn as public law, surcharge bans preserved revenue flows by limiting merchants' capacity to reduce their payment processing costs. Hoping constitutional law would provide relief from these payment processing costs, merchants also forayed into the public law arena. While the Supreme Court has stopped short of settling the substantive First Amendment arguments, a successful challenge could present an opportunity to test the behavioral theories that historically spurred card issuers to oppose surcharges.

This Article predicts that lending practices and surcharges will have the combined effect of supporting cardholder stratification. Further, this Article argues that the stratification will exacerbate racially problematic network effects extant in the relationship between wealthier cardholders and their less affluent counterparts. Aided by algorithms and behavioral theory, the credit card industry will continue to enroll subsistence borrowers into programs where

242. See Levitin, *Priceless*, *supra* note 7, at 1338.

243. See *id.*

the subsistence borrowers are likely to carry a balance. Subsistence borrowers' balances generate interest and late payment fees. Subsistence borrowers tend to have overconfidence in their capacity to manage credit card debt in the face of pressure to meet urgent financial needs. The industry uses the subsistence borrowers' overconfidence as a source of profit, to service their debt and to generate additional revenues not available from affluent consumers.

Merchant surcharges will further entrench cardholder segmentation in two respects. First, merchants will be free to dissuade the use of high-cost card products. Second, the poor may face predatory fees under the guise of reduced payment processing costs. Although the industry's approach to surcharges has been grounded in behavioral theories of strategic deterrence, surcharge fees simply place desperate borrowers in much the same position as those forced to use so-called "pay day" lenders. Poverty's effects can complicate the autonomous exercise of choices poor people make as consumers because poverty forces those under constant socio-economic strain to choose from a range of bad options. Being poor preoccupies the mind and consumes "substantial attentional resources."²⁴⁴ People living in poverty must necessarily cope with competing claims for limited financial resources. Economic stressors cast a pall over the allocation of cognitive resources informing choices made in the marketplace where urgent financial needs outstrip available finances.

What options exist for socially conscious consumers who may see appeal in rewards programs but feel uneasy about hurting their fellow consumers? How do lending institutions design equitable underwriting paradigms that appropriately identify risky borrowers without masking biases harmful to equity? We all make purchases. The manner of payment concurrently expresses who we are as social participants and supplies information to technocapitalists capable of using the information to profit from socioeconomic inequality.

Perhaps it is time for critical race theorists to deepen their foray into the discourse surrounding network effects. Scholars should broaden critical race theory's contours to account for technology's relationship with race. The relationship between race and technology did not inform the original purpose of card networks' formation when such cashless payments were less common. But the

244. Eldar Shafir, *Poverty and Civil Rights: A Behavioral Economics Perspective*, 2014 U. ILL. L. REV. 205, 209 (2014).

theory of network effects might be put to good use if equitably commandeered by a broad, interdisciplinary group of experts in law, economics, banking, computing, and information sciences. This Article aims to promote such an exercise by seeking out assistance from experts interested in blunting the effects of algorithmically framed bias in the marketplace. Poverty complicates subsistence spenders' ability to simply "make better choices." Reliance on debiasing, or cognitively altering a decision-maker's biases, simply diverts attention from the more pervasive and pernicious determinants of racism and "poverty trapping" people in economic distress.²⁴⁵

245. Cf. David Arnott, *Cognitive Biases and Decision Support Systems Development: A Design Science Approach*, 16 INFO. SYSS. J. 55, 62 (2006) (addressing negative side effects of debiasing).