

CREDIT REPORTING’S VICIOUS CYCLES

LUKE HERRINE[∞]

ABSTRACT

This article argues that, despite being the least discriminatory form of underwriting in history, consumer credit reporting can reinforce and deepen systemic inequalities. Credit reports can create two sorts of vicious cycles, which can contribute to cycles of poverty and deepen race-based disenfranchisement. The first takes place in credit markets themselves. Even on a neoclassical model of credit reporting, and especially on a model that accounts for cognitive imperfections, credit reports can amplify past problems with debt, most of which can be traced to broader forces that shape economic inequality. The second cycle arises when credit reports are used in extra-lending contexts. In non-lending contexts such as employment credit checks, credit reports do not seem to provide any useful information to employers, but they do reinforce the first vicious cycle and the disadvantage it amplifies. In quasi-lending contexts like insurance pricing, credit reports may provide predictive information, but the information they reveal seems only to be information about economic instability. By forcing economically unstable individuals to pay more for insurance (or making it harder to rent an apartment), the use of credit reporting deepens this instability. The fact that even a cheap and generally accurate system of underwriting can reinforce and deepen racial and economic inequities should provide reason to rethink the notion that “equal access” to consumer credit markets can truly serve egalitarian goals when the credit market is embedded in such a fundamentally unequal system.

I. INTRODUCTION.....	306
II. CREDIT REPORTING: A HISTORICAL INTRODUCTION.....	310
III. THE NEOCLASSICAL MODEL OF CREDIT SCORING	315
A. The Model Itself.....	315
B. Assessing the Model	318

[∞] Legal Research Fellow, Furman Center for Real Estate and Urban Policy. J.D. 2015, New York University School of Law. I am indebted to Oren Bar-Gill and Kevin Davis for indispensable guidance throughout the writing of this piece and to Amy Traub, whose work I relied on heavily and who generously commented on a draft. Thanks to my fellow Lederman Fellows for their helpful comments, especially Patrick Corrigan and Michael Williams. Lastly, thanks to an anonymous CRA industry insider who generously and patiently talked me through a number of different issues. All errors and infelicities that remain are, of course, mine.

IV. THE FIRST VICIOUS CYCLE: CREDIT MARKETS	322
A. Modeling the Vicious Cycle	322
B. <i>Cui Malo?</i>	326
C. Marking the Prey for Predatory Loans	328
V. THE DEBT SAFETY NET AND DISCRIMINATION’S REVERBERATIONS	331
VI. THE CRUEL IRONIES OF CREDIT REPORTING OUTSIDE LENDING CONTEXTS	336
A. Quasi-Lending: Insurance Scores.....	337
B. Non-Lending: Employment Credit Checks	339
C. The Second Vicious Cycle	342
VII. RETHINKING HOW ECONOMIC EQUALITY RELATES TO CREDIT REPORTING	344
A. General Considerations	344
B. Policy Recommendations for Extra-Lending Contexts	346
C. Policy Recommendations for Credit Markets.....	348
VIII. CONCLUSION	350

I.

INTRODUCTION

In the heady days of the “rights revolution” of the 1960s and 70s, one demand shared by many feminists, anti-racists, and anti-poverty advocates was a right to equal access to consumer credit.¹ This was something new. Granted, regulatory concern in the United States about restricting poor people to crippling interest rates dates back to at least the beginning of the twentieth century.² But the post-war period saw consumer credit play a central role in the development of the middle class, such that “[b]y the 1960s, credit access was deemed to be unequivocally beneficial.”³ The worry that crippling debt might ruin lives was

1. See LOUIS HYMAN, *DEBTOR NATION: THE HISTORY OF AMERICA IN RED INK* 173–206 (2011).

2. See LENDOL CALDER, *FINANCING THE AMERICAN DREAM: A CULTURAL HISTORY OF CONSUMER CREDIT* 111–35 (1999) (discussing the two prong attack on “loan sharks” of anti-usury laws and semi-charitable alternatives that occurred in the 1910s–20s.). As Calder himself points out, worries about the potentially ruinous effects of too much debt have long been part of U.S. politics and moralizing, but the transitions to industrial capitalism along with more sophisticated social sciences led to a change in the way credit was used and thought of in this era. *Id.* at 135–55.

3. HYMAN, *supra* note 1, at 174.

subordinated to the felt experience of many that restricting cheap credit to white men was unfairly restricting access to the good life.⁴ The fight for “access to credit” meant a fight to end gender and racial discrimination against potential borrowers and a fight for neutral criteria to determine who should get loans and on what terms.⁵ It was a fight, in other words, for equality of opportunity within a deeply unequal structure, not a fight to equalize the structure per se.

Although advocacy ultimately led to the legal enshrinement of the right of equal access to credit, the truly transformative force in implementing the right was lenders’ increasing reliance on the credit score.⁶ “The call for judging individuals on their own merits went against fifty years of lending practices,” points out historian Louis Hyman.⁷ While credit scoring still relied on categorization, “[w]hat could be done... was to make sure that discrimination based on cultural assumptions and habits be replaced by scientific discrimination based on data and evidence.”⁸ Credit scoring offered the possibility of a statistically-based (loose at first, but increasingly rigorous over time) assessment of a borrower’s ability to repay a loan given that borrower’s past and present borrowing behavior. Credit scoring has largely lived up to its promise. Today, nearly every lending decision is based on a credit score.⁹ There is now widespread agreement among social scientists, especially economists, that it is a more accurate, less discriminatory, faster, cheaper, and more efficiency-facilitating way to evaluate creditworthiness than the more catch-as-catch-can underwriting that came before.¹⁰

And yet, as the subprime mortgage crisis made so painfully clear, even when lending decisions are made by computers taking into account only past borrowing behavior, inequality in lending markets persists and can lead to

4. *See id.*

5. I am compelled to add the caveat that this was not the only narrative being pushed during this time period. Louis Hyman argues that the notion of a “neutral” income-based determination of creditworthiness was pushed by middle-class feminists who were more easily heard in the halls of Congress than the more radical anti-poverty and anti-racist advocates. *Id.* at 201–06.

6. The main enshrinement of the principle of equal access to credit is the Equal Credit Opportunity Act (ECOA), 15 U.S.C. § 1691 (2012). Also relevant, though, is the Truth in Lending Act, including especially its amendment regarding credit reporting, the Fair Credit Reporting Act, 15 U.S.C. § 1681 (2012).

7. HYMAN, *supra* note 1, at 205.

8. *Id.*

9. *See infra* note 51 and accompanying text.

10. *See, e.g.*, JOHN M. BARRON & MICHAEL STATEN, THE VALUE OF COMPREHENSIVE CREDIT REPORTS: LESSONS FROM THE U.S. EXPERIENCE (2000), <http://www.privacyalliance.org/resources/staten.pdf>; STEVEN FINLAY, CONSUMER CREDIT FUNDAMENTALS (2d ed. 2009); MICHAEL A. TURNER, ROBIN VARGHESE & PATRICK D. WALKER, POLICY & ECON. RESEARCH COUNCIL, U.S. CONSUMER CREDIT REPORTS: MEASURING ACCURACY AND DISPUTE IMPACTS (2011). *But see* CHI CHI WU, NAT’L CONSUMER LAW CTR., SOLVING THE CREDIT CONUNDRUM: HELPING CONSUMERS’ CREDIT RECORDS IMPAIRED BY THE FORECLOSURE CRISIS AND GREAT RECESSION 15 (2013) [hereinafter WU, SOLVING THE CREDIT CONUNDRUM] (arguing for a “return to traditional underwriting” in the sense that lenders should take into account more than credit scores).

disastrous consequences that deepen economic inequality more broadly.¹¹ In part because of this fact, credit reporting has faced increased scrutiny in recent years.¹² But these assessments tend to hone in on the flaws in credit reporting—its surprisingly high error rates,¹³ its shoddy dispute resolution system,¹⁴ its inclusion of debt types that may not reflect other payment behavior, etc.¹⁵—all of which is consistent with the narrative of equal access to credit.

It is the narrative of equal access to credit as a way to create economic opportunity that needs rethinking. Not only is broader access to credit unlikely to reduce inequality, it may actually reinforce and deepen inequalities brought about through other means. This is so even if all of the warts of the actually existing credit reporting system are assumed away.

To see how it works, I assume that credit reports accurately reflect a borrower's history in credit markets and that credit scores accurately predict the likelihood of default given this information. Even under these circumstances, credit reporting can create two reinforcing vicious cycles that offload more and more risk onto economically vulnerable borrowers while making it more and more difficult to hedge against that risk.¹⁶ The first cycle occurs in the consumer

11. See *infra* Part V. A thorough tracing of the connections between home lending and high finance that led to the meltdown can be found in JENNIFER TAUB, *OTHER PEOPLE'S HOUSES* (2014). Many of the problems in the immediate lead-up to the crisis involved outright fraud in “no-doc” loans, which did not require credit reports. However, the very existence of private label securitization of mortgages required a credit scoring system. The delimitation of the prime/subprime market (and thus clearing the way for predatory practices in the latter) depended on credit scoring as well.

12. See, e.g., CONSUMER FIN. PROT. BUREAU, *KEY DIMENSIONS AND PROCESSES IN THE U.S. CREDIT REPORTING SYSTEM: A REVIEW OF HOW THE NATION'S LARGEST CREDIT BUREAUS MANAGE CONSUMER DATA* (2012) [hereinafter CFPB REPORT]; SHAWN FREMSTAD & AMY TRAUB, *DEMOS, DISCREDITING AMERICA: THE URGENT NEED TO REFORM THE NATION'S CREDIT REPORTING INDUSTRY* 7 (2011); Dean Foust & Aaron Pressman, *Credit Scores: Not So Magic Numbers*, *BLOOMBERG BUSINESSWEEK MAG.* (Feb. 6, 2008), <http://www.businessweek.com/stories/2008-02-06/credit-scores-not-so-magic-numbers>.

13. See CFPB REPORT, *supra* note 12, at 23–26; FREMSTAD & TRAUB, *supra* note 12, at 11; TURNER, VARGHESE & WALKER, *supra* note 10, at 33–37; Fed. Trade Comm'n, *Report to Congress Under Section 319 of the Fair and Accurate Credit Transactions Act of 2003*, 2012 FTC 319 STUDY 1 [hereinafter FTC Report].

14. CFPB REPORT, *supra* note 12, at 27–35; FREMSTAD & TRAUB, *supra* note 12, at 11; TURNER, VARGHESE & WALKER, *supra* note 10, at 38–40; FTC Report, *supra* note 13, at 54.

15. FREMSTAD & TRAUB, *supra* note 12, at 13–14 (discussing the role of medical debt in credit scores).

16. Several consumer advocates and scholars have already mentioned the possibility of a vicious cycle of credit reporting, although mostly in passing. Here I present a rigorous and sustained focus on the phenomenon and its implications. The closest argument to the one I present here is the one presented in a single paragraph of a 2011 Demos report, FREMSTAD & TRAUB, *supra* note 12, at 12, and in a single paragraph in the second edition of Strike Debt's *Debt Resister's Operations Manual*, both of which argue that “low scores result in worse loan conditions that in turn increase their riskiness.” STRIKE DEBT, *THE DEBT RESISTER'S OPERATIONS MANUAL* (2d ed. 2014), <http://strikedebt.org/drom/chapter-one/>. The idea of a vicious cycle in lending is not always treated separately from other problems with lending practices such as redlining and predatory lending or from broader problems such as racist and sexist job markets. Especially because of this intermingling, it also sometimes goes by the name “self-fulfilling prophecy” rather than “vicious

lending market: even idealized credit scores, when combined with risk-based pricing, condemn borrowers to repeat their credit histories by making riskier borrowers take on riskier loans. Compounding risk makes default all the more likely, which makes the need to take on riskier loans another time all the more likely. Subprime can thus perpetuate subprime.

The second cycle occurs because credit reports have become so popular that they are also used in extra-lending contexts such as job applications and hospital billing. When a bad credit report makes life more expensive (by, for instance, raising insurance costs) and makes it harder to earn the means by which one can pay for those expenses (by, for instance, preventing admission to the bar) it forces some consumers to take on more debt on worse terms, which makes life more expensive and harder to pay for, reinforcing the cycle.

Taken together, credit reporting can create a dynamic whereby an experience with bad credit (or the inability to piggyback on one's parents' good credit) makes it harder to advance economically. The dynamic is akin to the "permanent criminal record" that has recently come under criticism from criminal law scholars.¹⁷ Of course, the vicious cycles run quite contrary to the dynamic suggested by the notion that access to credit on non-discriminatory terms creates a channel for economic opportunity.

The existence of vicious cycles suggests that, at a minimum, the use of credit reporting outside of lending contexts should face stricter regulatory scrutiny (as it has begun to). More controversially, they provide one reason to reconsider the role of usury caps in consumer credit regulation. A carefully designed cap (or even a floor on interest rates) could put the brakes on the compounding of disadvantage at the lower end of the consumer lending market while minimizing the effects of adverse selection. Less invasive but likely less effective: regulators could require or incentivize credit reporting agencies (and lenders) to discount for loan risk in making lending and pricing decisions.

Beyond particular policy implications, however, acknowledging that economic inequality can reverberate and be amplified within credit markets should provide reason to focus less attention on making credit markets "fair" and more on making redistribution of income and wealth more effective. Social insurance is a more effective and more fair way to hedge against risk than loans.

I divide the remainder of this article into six parts. In Part II, I provide background on credit reporting through a thumbnail sketch of the history of

cycle." See, e.g., MELVIN L. OLIVER & THOMAS M. SHAPIRO, *BLACK WEALTH/WHITE WEALTH* 146 (2d ed. 2006) (arguing that banks deserting minority communities can create a "self-fulfilling prophecy"); Kelly Gallagher, *Rethinking the Fair Credit Reporting Act: When Requesting Credit Reports for "Employment Purposes" Goes Too Far*, 91 IOWA L. REV. 1593, 1606 (2006) (briefly pointing to the possibility of a vicious cycle that includes employment discrimination); Keith N. Hylton & Vincent D. Rougeau, *Lending Discrimination: Economic Theory, Econometric Evidence, and the Community Reinvestment Act*, 85 GEO. L.J. 237, 257 (1996) (arguing that initial lending discrimination can create a vicious cycle where it becomes rational to discriminate).

17. See JAMES B. JACOBS, *THE ETERNAL CRIMINAL RECORD* (2015).

consumer loan underwriting. In Part III, I bring together the neoclassical literature on how credit reporting facilitates fair and efficient lending and discuss the evidence in support of these arguments. In Part IV, I present the first vicious cycle—which takes place in credit markets—while remaining in the rarefied world of economic modeling. In Part V, I summarize the empirical evidence that shows that this vicious cycle overwhelmingly affects borrowers facing economically precarious situations—frequently low-income borrowers and borrowers of color.

In Part VI, I lay out the second vicious cycle—which takes place when credit reports are utilized in extra-lending contexts. In Part VII, I discuss the implications of my arguments for the relationship between inequality and consumer credit, arguing that the narrative of equal access to credit comes up far short. I then present some potential policy implications.

II.

CREDIT REPORTING: A HISTORICAL INTRODUCTION

As with many matters, Shakespeare dramatized loan underwriting with especial clarity. A debt provides the driving conflict of *The Merchant of Venice*. The debt is incurred in Act I, scene 3, when Bassanio, who needs money to pursue his beloved Portia, requests a three thousand ducat loan from Shylock. Antonio has promised to serve as guarantor.¹⁸ Shylock ponders aloud whether and on what terms to issue the loan. He only momentarily concerns himself with the fact that he himself “cannot instantly raise up the gross of full three thousand ducats,” since he knows that his fellow moneylender Tubal will advance it to him.¹⁹ More worrisome to him is Antonio’s ability to raise the funds when the time comes to pay back the loan.²⁰ Antonio’s income stream, after all, depends on some risky business ventures then at sea.²¹ However, because Shylock knows Antonio to be a “good man” and “sufficient” in matters financial, he also expects that Antonio will not cheat him if the trade winds do not return him a profit.²² Shylock’s last hang-up is the most notorious. In the past, Antonio, who is anti-Semitic and against the practice of usury, has treated Shylock as a lesser human.²³ Perhaps in a spirit of vengeance, perhaps out of a doubt that Antonio will pay interest, perhaps to make the deal about power rather than money, these past slights lead Shylock to demand a pound of Antonio’s flesh as collateral in place of interest.

18. WILLIAM SHAKESPEARE, *THE MERCHANT OF VENICE* act 1, sc. 3, ll. 4–5 (Barbara A. Mowat & Paul Werstine eds., Washington Square Press 1992).

19. *Id.* ll. 56–59.

20. *Id.* ll. 15–17.

21. *Id.* act I, sc. 1.

22. *Id.* act I, sc. 3, ll. 12–16.

23. *Id.* ll. 116–63.

In this scene, written just before the turn of the seventeenth century,²⁴ we see Shylock engaging in underwriting as it has taken place through most of history. A lender—especially a profitmaking lender—has always had to take into account his own access to funds and the borrower's likelihood of paying back the loan, given the borrower's means and reliability.²⁵ By the early twentieth century, these considerations had been whittled down into a commonly used mnemonic, the "Four Cs": (1) Capital/Collateral, (2) Capacity, (3) Character, and (4) (economic) Conditions.²⁶ As Shylock's example shows, these factors are not strictly orthogonal, especially (2) through (4). A trustworthy borrower (like Antonio) may be more likely to scrounge for the money to repay; bad economic conditions (like a storm off the Venetian coast) will reduce everybody's means; more valuable collateral (like a pound of flesh) may make character irrelevant. As Shylock's example also illustrates, estimations of a borrower's likelihood of paying were, for most of history, based largely on interpersonal considerations. Lenders most always knew borrowers—whether socially or by reputation. Whether the lender thought a borrower creditworthy depended, as the etymology of that term suggests,²⁷ in large part on whether a borrower could be trusted. A lender's judgment about a borrower's trustworthiness was dependent entirely on anecdotal evidence, tainted by all kinds of bias (such as the pain caused by fact that the borrower had previously "spet upon [the lender's] Jewish gabardine").²⁸ After all, the data and computing power needed to determine, with any rigor, which characteristics of borrowers predict default/repayment simply did not exist until the late 1960s.²⁹

Consumer credit reporting agencies (CRAs) grew out of local information-sharing networks among lenders in the early twentieth century.³⁰ Merchants—

24. *Shakespeare's Plays: The Merchant of Venice*, ROYAL SHAKESPEARE COMPANY, <http://www.rsc.org.uk/explore/shakespeare/plays/the-merchant-of-venice/> (last visited June 17, 2014).

25. See DAVID GRAEBER, *DEBT: THE FIRST 5,000 YEARS* 328–29 (2011) (discussing the role trust has played since prehistoric credit systems); Kenneth Lipartito, *Mediating Reputation: Credit Reporting Systems in American History*, 87 *BUS. HIST. REV.* 655, 656 (2013) (describing how creditworthiness and character have been entangled since at least the 16th century).

26. See, e.g., FINLAY, *supra* note 10, at 143–44.

27. In its earliest appearances in English, "to credit" meant "to believe" or "to trust." These are the same meanings as the Latin "credere," which has cognates in all Romance languages and probably came to English via the French around the 16th century. Other English cognates include "creed," "credence," and "credentials." See *Credit*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/credit> (last visited May 22, 2014); see also GRAEBER, *supra* note 25, at 328 ("When people [in feudal England] used the word 'credit,' they referred above all to a reputation for honesty and integrity; and a man or woman's honor, virtue and respectability, but also, reputation for generosity, decency, and good-natured sociability, were at least as important considerations when deciding whether to make a loan as were assessments of net income.").

28. SHAKESPEARE, *supra* note 18, l. 122.

29. And even then it could not "accurately predict the future profits of a borrower well enough to make a lending decision" until 1992. HYMAN, *supra* note 1, at 266.

30. For instance, the Retail Credit Company, created in 1899, grew out of a network of Atlanta grocers. After expanding across the country and switching from an informal informant

who did most of the consumer lending back then—formed these networks because, increasingly, they did not know all of their customers.³¹ As such, they could not make the same sorts of judgments about creditworthiness that Shylock could about Antonio. Because lenders wanted to make many of the same judgments using much of the same reasoning, CRAs collected essentially any information about borrowers that they could get their collective hands on. They operated more or less as private eyes.³² Agents interviewed neighbors and bartenders; they used dissimulation to discover dirty details about borrowers' pasts; they collected information on political sympathies and sexual peccadilloes; they repeated rumors without verifying them.³³ At every stage, reports were colored by "the social and cultural prejudices of the day" concerning race, class, gender, sexuality, religion, and beyond.³⁴

Starting around midcentury, much of this changed. Led by the innovations of Credit Data Corporation (now Experian), credit reports began to focus less on general descriptions of borrowers' reputations and more on financial history.³⁵ Increasing computerization, anonymization, and centralization of credit data in combination with professionalization of agents made reporting less informal and investigative and more standardized. A more efficient way to evaluate creditworthiness was needed for a consumer credit market that was growing in leaps and bounds. Spurred on by consumer advocates, a burgeoning feminist movement, and civil rights leaders, the Fair Credit Reporting Act of 1970 hastened this process—formalizing various elements of credit reporting, creating standards for accuracy, and limiting its use.³⁶ Additionally, the Equal Credit Opportunity Act of 1974, as amended in 1976, prohibited lending discrimination based on a number of protected classes.³⁷

Nowadays credit reports mainly contain information on individuals' borrowing records, mostly furnished by various players in the finance industry.³⁸

network to a paid staff of inspectors, it became Equifax in the mid-1970s. HYMAN, *supra* note 1, at 207–08. Interestingly, the evolution was parallel in the UK: credit bureaus there evolved from the internal data sharing systems of mail order companies in the 1970s. FINLAY, *supra* note 10, at 164. Note also that credit reporting for business had existed much earlier—created in the middle of the 19th century. See Lipartito, *supra* note 25, at 656.

31. See Marco Pagano & Tullio Jappelli, *Information Sharing in Credit Markets*, 48 J. FIN. 1693, 1711 (1993).

32. Indeed, for a time, the FBI was the CRAs' biggest customer. HYMAN, *supra* note 1, at 210.

33. See, e.g., *id.* at 207.

34. Lipartito, *supra* note 25, at 670.

35. See HYMAN, *supra* note 1, at 211.

36. 15 U.S.C. § 1681 (2012). On the social movement's role in this process, see HYMAN, *supra* note 1, at 173–206.

37. 15 U.S.C. § 1691 (2012).

38. Furnishers have to report on at least 100–200 active accounts per month and must be trained in the relevant software. Thus very small lenders are not included, although collection agencies are. The top 10 furnishers account for fifty-seven percent of credit lines reported. CFPB REPORT, *supra* note 12, at 14, 18.

More specifically, reports can include identifying information (name, address, SSN, driver's license number, dependents, etc.), legal information (court judgments, bankruptcies, repossessions, etc.), information on the financial past (timeliness of payments, amount of payments, defaulted accounts, etc.), information on the financial present (open credit lines, current indebtedness, default status, etc.), information on who has requested to see the credit report, and employment information.³⁹ The "Big Three" CRAs—Transunion, Experian, and Equifax⁴⁰—all maintain reports on more than four out of five adult Americans.⁴¹

Although various state and federal regulations, especially the Equal Credit Opportunity Act, prohibited lenders from making decisions based on a number of suspect classes, for much of the twentieth century lenders continued to evaluate borrowers—and their credit reports—according to their own idiosyncratic underwriting procedures. Today most lenders rely on credit scores, making credit-granting decisions almost entirely algorithmic.⁴²

A credit score is a three-digit number that ranks consumers based on their odds of default.⁴³ Most scores used in lending decisions are generated using a series of algorithms created by Fair Isaac and Company (FICO).⁴⁴ The higher the score (FICO's basic scores range from 300 to 850),⁴⁵ the lower the probability that the borrower will default. Based on extensive empirical testing, a score is generally made up of eight to fifteen "characteristics" of a borrower.⁴⁶ These characteristics can be divided up into five categories: payment history, which accounts for thirty-five percent of the final score; current indebtedness, thirty

39. See, e.g., BD. OF GOVERNORS OF THE FED. RESERVE SYSTEM, REPORT TO THE CONGRESS ON CREDIT SCORING AND ITS EFFECTS ON THE AVAILABILITY AND AFFORDABILITY OF CREDIT 15 (2007) [hereinafter FED REPORT]; FINLAY, *supra* note 10, at 169–81.

40. TransUnion, Experian, and Equifax have an oligopoly on the U.S. market and increasingly dominate global credit reporting markets. FINLAY, *supra* note 10, at 182 ("Most privately operated credit reference agencies in the world are owned by Equifax, Experian or TransUnion.").

41. Each CRA has about two hundred million credit reports. CFPB REPORT, *supra* note 12, at 21. The over-18 U.S. population is approximately 243 million. *State and County QuickFacts*, U.S. CENSUS BUREAU, http://www.census.gov/popclock/?e=gd&utm_medium=email&utm_source=govdelivery (last visited June 17, 2014).

42. CFPB REPORT, *supra* note 12, at 10.

43. A given score does not correspond to a given probability of default, but rather to the relative riskiness of the group of consumers with that score. In this way it is like an LSAT score.

44. FICO provides credit scoring services to "over ¾ of the market." FREMSTAD & TRAUB, *supra* note 12, at 7.

45. *Credit Basics*, MYFICO, <http://www.myfico.com/crediteducation/articles/> (last visited Mar. 17, 2014).

46. For explanations of how credit scores are generated, see FED REPORT, *supra* note 39, at 18–22; STEVEN FINLAY, CREDIT SCORING, RESPONSE MODELING, AND INSURANCE RATING: A PRACTICAL GUIDE TO FORECASTING CONSUMER BEHAVIOR chs. 3–4 (2d. ed 2012).

percent; length of credit history, fifteen percent; types of credit used, ten percent; and inquiries about credit, ten percent.⁴⁷

William Fair and Earl Isaac, the fathers of modern credit scoring and the creators of the eponymous FICO, developed their credit scoring system in 1958,⁴⁸ but technology did not make it feasible for wide use until the 1970s.⁴⁹ By 1990, over eighty percent of lending decisions used credit scores.⁵⁰ Although most everybody who studies credit scoring agrees that it is a much more accurate predictor of default than judgment-based underwriting,⁵¹ just as important to its widespread adoption has been lenders' perceptions of its accuracy. While it was not until 1992 that "commercially available software [could] accurately predict the future profits of a borrower well enough to make a lending decision,"⁵² credit scoring had already become central to those decisions well before that date.⁵³ One reason this might have been the case is that so long as credit scoring and judgmental evaluations of credit reports performed more or less equivalently well, credit scoring was much quicker and cheaper.

But a more interesting reason might have been involved as well. As sociologist Bruce Carruthers has argued, competitive markets require rational decision-making, which requires some sort of quantification of risk even if that quantification is not fully possible. For this reason lenders may favor quantitative and apparently objective measures even before those measures have much predictive power.⁵⁴ And since the "American regulatory state seem[s] to favor rules-based rather than principles-based regulation,"⁵⁵ the aforementioned consumer credit regulations of the 1970s might have further pushed CRAs and lenders towards cut-and-dried cutoffs for creditworthiness. Such simple quantification of the riskiness of borrowers also serves to ease the process of loan securitization by making it easier to parcel the loans issued to different borrowers into different tranches of riskiness.⁵⁶ In this way, the task of

47. FED REPORT, *supra* note 39, at 20–25. Although these ratios are commonly cited and are a more or less accurate description of most credit scores, the exact proportion that each characteristic accounts for varies by subpopulation and by client. FICO creates custom scores for each CRA and the CRAs themselves have created a separate credit scoring system common to all of them called VantageScore. More recently, there have been a proliferation of new scores that take into account more and different information for borrowers with shorter mainstream credit histories. Things only get more complicated from there. *See, e.g., id.* at 20–35.

48. *Id.* at 12.

49. *Id.*

50. FINLAY, *supra* note 10, at 146.

51. *See* FED REPORT, *supra* note 39, at 39 (declaring that studies "consistently find that credit-scoring systems outperform judgmental systems in predicting loan performance"). *But see* WU, SOLVING THE CREDIT CONUNDRUM, *supra* note 10, at 15.

52. HYMAN, *supra* note 1, at 266.

53. *See supra* notes 35–37 and accompanying text.

54. Bruce G. Carruthers, *From Uncertainty Toward Risk: The Case of Credit Ratings*, 11 SOCIO-ECON. REV. 525, 526–27 (2013).

55. *Id.* at 544.

56. Anonymous former employee of the credit reporting industry.

underwriting is fractured. Lenders offload default risk onto investors, but investors only perceive the risk through the lenders' price increases.⁵⁷

The quantification and formalization of credit reporting in lending markets has, somewhat paradoxically, made underwriting more of a black box. A credit score communicates only the relative risk of lending to different groups of borrowers—it does not concern itself with which aspects of an individual borrower make that borrower risky (or not). As long as a lender can create a profitmaking model using a score, it need not concern itself with why. Quasi-anonymized underwriting removes the possibility of arbitrariness or bigotry from the lending decision, much to the approval of supporters of equal credit opportunity.

However, credit reporting's success in the lending market led to an ironic twist. Since at least the 1960s,⁵⁸ utility companies, employers, insurance companies, landlords, and some other non-lenders have found uses for CRAs' troves.⁵⁹ As will be discussed in more detail below,⁶⁰ in some of these contexts (e.g. car insurance) credit scores are used and have even been found to be predictive of certain behaviors. In other contexts (e.g. professional licensing), a judgmental evaluation of credit reports is used based on no good empirical evidence. In still other contexts (e.g. cell phone billing), credit scores are relied on that have not been calibrated to predict behavior in the specific context in which they are being used. To some degree, these quasi-lending and non-lending utilizations of credit reports and scores can be attributed to a halo effect. Perhaps just as important is the fact that credit reports are the cheapest rough-and-ready background check around. Both of these possibilities depend on a Shylockian conflation of borrowing behavior with underlying character traits that predict other behavior. Credit scoring has increased lenders' profits by providing a scientific version of creditworthiness to replace rough biased estimates of trustworthiness, but it has led non-lenders to use creditworthiness as a proxy for trustworthiness.

III.

THE NEOCLASSICAL MODEL OF CREDIT SCORING

A. The Model Itself

The most rigorous defenses of credit reporting have come in the language of neoclassical economics. As with most neoclassical models, the agents in the credit market are assumed to be rational and utility-maximizing with stable

57. For a related argument, see Christopher L. Peterson, *Predatory Structured Finance*, 28 *CARDOZO L. REV.* 2185 (2007) (arguing that loan originators' ability to securitize and sell off loans makes it difficult to determine who to hold accountable and how in the case of loans gone wrong).

58. HYMAN, *supra* note 1, at 209 (noting that employers began to use credit checks in the 1960s).

59. *See, e.g.*, FREMSTAD & TRAUB, *supra* note 12, at 4.

60. *See infra* Part IV.B.

preferences revealed by their behavior in the marketplace.⁶¹ The market is assumed to be competitive. Lenders are assumed to make lending decisions solely on the basis of potential profitability, in part because discriminatory lenders would be competed out of the market under most conditions.⁶²

Credit reporting is primarily justified as a remedy for information asymmetries between lenders and borrowers.⁶³ A rational borrower will know her credit history and other facts relevant to her probability of repayment, but a rational lender will lack this information unless that lender investigates (or pays someone to investigate).⁶⁴ If the use of CRAs results in a material advantage to lenders—if it accounts for enough of the variance in borrower behavior to allow lenders who use them to profit more than lenders who do not—it will bridge the information gap more efficiently.⁶⁵ Credit reporting, especially in the form of credit scores, is also theorized to grease the wheels of the lending market, making lending decisions quicker, easier, and less costly. In its dual role—reducing information asymmetries and facilitating lending decisions—credit reporting is said to make lending more efficient (in both the allocative and cost-reducing senses) and more equitable. It does this through a few specific mechanisms: it reduces adverse selection, decreases incumbent lenders' rents, limits moral hazard, reduces lending and monitoring costs, and increases access to credit.

Several authors have theorized that the increased information that credit reports provide reduces the effects of adverse selection.⁶⁶ Adverse selection occurs in lending markets “when lenders can’t distinguish good borrowers from

61. See STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF THE LAW 1–3 (2004).

62. I am here referring primarily to “taste-based” discrimination rather than “statistical” or “new style” discrimination, both of which can exist without being competed away in neoclassical conditions. For an elaboration of the differences between these and a theory about which might be operating in lending markets, see Hylton & Rougeau, *supra* note 16.

63. Within the neoclassical framework, the notion of information asymmetries can be traced back to George A. Akerloff, *The Market for “Lemons”: Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970). This analysis was extended to the lending context in Joseph E. Stiglitz & Andrew Weiss, *Credit Rationing in Markets with Imperfect Information*, 71 AM. ECON. REV. 393 (1981). For a good summary of how this literature has extended to the analysis of credit reporting—from which much of this section borrows—see BARRON & STATEN, *supra* note 10.

64. Note that this assumes that lenders and borrowers know *which* information is relevant to predicting the probability of repayment and will discount information that is irrelevant. Thus, more information is always better.

65. Credit scores will only provide information about *borrower* risk. A lender will still have to take into account other factors that affect probability of repayment, such as the risk of a macroeconomic shock, if it wants to price risk accurately. In making this division I pass over the complication that macroeconomic risks and borrower risks are not truly separable—a borrower is riskier if the job market is less predictable, for instance. I also leave for later the fact that the lender should also price for *loan* risk (i.e. a more expensive loan is harder to pay), assuming that the lender is not doing so.

66. FED REPORT, *supra* note 39, at 38; BARRON & STATEN, *supra* note 10, at 3; Robert Hunt, *A Century of Consumer Credit Reporting in America* 4 (Fed. Reserve Bank of Phila., Working Paper No. 05-13, 2005).

bad borrowers [and] all borrowers are charged an average interest rate that reflects their pooled experience. But, this rate is higher than good borrowers warrant and causes some good borrowers to drop out of the market, thereby shrinking the customer base and further raising the average rate charged to remaining borrowers.”⁶⁷ Lenders are especially unlikely to be able to distinguish risky from safe borrowers if borrowers have loans from multiple lenders, have had little experience with credit, are mobile, or are especially heterogeneous.⁶⁸ Although lenders will each have incentives to keep and hide profitable borrowers while passing off unprofitable borrowers onto other lenders, they will also have incentives to share information, especially if borrowers tend to change lenders.⁶⁹

CRA can resolve the collective action problem by collecting information from all lenders. When lenders can utilize this information, they can price risk by charging riskier borrowers higher interest rates and safer borrowers lower interest rates, preventing the flight of safe borrowers.⁷⁰ Once sufficient information sharing is achieved, it might erode information rents enjoyed by incumbent lenders, making the market more competitive.⁷¹ Incumbent lenders, anticipating such a loss of market share, might still participate in information sharing, since “it’s possible that by sharing some information, lenders could benefit from a reduction in adverse selection without losing too much profit.”⁷² This mechanism will be especially effective in open-ended credit markets such as those for credit cards, since lenders will find it easier to poach borrowers from other lenders mid-contract if they can accurately estimate the risk of borrowers and price their product accordingly.⁷³

Lenders will also have an incentive to share information to prevent opportunistic defaults, or, in other words, to limit moral hazard. If borrowers know that their default with one borrower will be reported to another, that borrower will be deterred from defaulting. Not only does this reduce the probability of defaults, thus increasing profitability of loans, it also lowers monitoring costs and reduces the need for collateral, securitization, or other costly forms of risk hedging.⁷⁴ Just as with the adverse selection problem, here there will be a collective action problem, since no individual lenders will want to share information and risk others not sharing that information. A CRA can break this impasse. Although accurate credit reporting will make it more difficult for

67. BARRON & STATEN, *supra* note 10, at 3.

68. *Id.*; *see also* Pagano & Jappelli, *supra* note 31, at 1694.

69. *Cf.* BARRON & STATEN, *supra* note 10, at 3, 5.

70. Lenders do not always use credit scores as part of a risk-based pricing scheme. Some lenders simply set a cut-off at a certain score. There are also hybrid strategies. *See, e.g.*, FINLAY, *supra* note 10, at 157–59.

71. BARRON & STATEN, *supra* note 10, at 4.

72. Hunt, *supra* note 66, at 8 (discussing incumbent lenders).

73. FED REPORT, *supra* note 39, at 38.

74. *Cf. id.* at 35, 37.

borrowers to default opportunistically, it will lower the cost of credit for all borrowers, likely resulting in a net gain for all borrowers.

Credit reporting, and particularly credit scoring, will also serve to decrease the amount of time and cost involved in evaluating the creditworthiness of a borrower.⁷⁵ It will do so by reducing or eliminating the need for a lender to perform its own underwriting investigations. Credit scoring builds on this reduction by eliminating the underwriting process altogether—a lender need only pay for credit scoring service and a quantitative analysis of the riskiness of any borrower is sent to them in seconds.⁷⁶ Lenders can thus cut costs dramatically without sacrificing accuracy in risk prediction.⁷⁷ Borrowers will benefit from this cost reduction when lenders pass on the savings. The time reduction will allow borrowers to shop for credit more effectively, since they can learn if they are approved for a loan without having to wait and can thus compare prices more accurately. The inability of lenders to hold up the credit granting process will also increase competition in the lending market.

When all of these effects combine, both lenders and borrowers benefit. Together they decrease costs for lenders while increasing the profitability of their loan portfolios. Borrowers as a whole will benefit from the passing on of the benefit of decreased costs and increased competition.

Moreover, additional borrowers will be able to enter the market for a number of reasons. First, lower costs will move the market equilibrium down the supply curve. Second, lenders will be able to lower prices for less risky borrowers who might have previously seemed risky on less accurate forms of underwriting (although this effect might be balanced out by the higher prices for riskier borrowers who previously seemed less risky). Third, lenders will be better able to price for risk, allowing them to offer credit to riskier borrowers who might previously have been excluded from the market. Overall, there seems to be a net gain in efficiency, competitiveness, and equity.

B. Assessing the Model

Because the metamorphoses of the consumer lending and credit reporting industries over latter half of the twentieth century were rapid and multifaceted,⁷⁸ it is difficult to rigorously assess causal connections between particular aspects of these transformations. Beginning in the 1970s and accelerating in the following decade, there were changes in technology,⁷⁹ in regulation of interest

75. *Id.* at 36.

76. Depending on the type and amount of a loan, many lenders will supplement credit scores with some form of judgmental underwriting. *See* FINLAY, *supra* note 10, at 155–56.

77. Various authors have questioned the accuracy of credit scores. *See, e.g.*, CFPB REPORT, *supra* note 12.

78. *See generally* CHARLES GEISST, COLLATERAL DAMAGED (2009); HYMAN, *supra* note 1.

79. Computers, for instance, fundamentally changed the way credit reporting worked, the records lenders could keep, and the sorts of loans lenders could offer. Credit cards, which are now

rates,⁸⁰ in sources of funding,⁸¹ in the uses of credit,⁸² in the focus of regulators,⁸³ etc. So if, for instance, one wanted to determine whether the rise of credit scores led to more efficient risk-based pricing, one would have to account for the fact that rate deregulation, cheaper capital through securitization, and governmental pressures to make credit available to underserved neighborhoods, among other things, would have also pushed in that direction. Moreover, credit scoring not only became more widely used and more empirically robust, it also began to be used differently.⁸⁴ Perhaps the most vexing complication is that credit scoring was adopted so rapidly in the United States that it is very hard to compare it with any other form of underwriting.⁸⁵

Keeping these caveats in mind, there is substantial but underdeveloped evidence indicating that credit scoring has at least some of the predicted effects of the discussed models. Comparative and historical evidence on the relationship between consumer mobility and credit reporting point to the conclusion that

central to consumer credit markets, were not invented in their modern form until the 1960s and were a break-even luxury item until the 1980s. See HYMAN, *supra* note 1, at 218.

80. The pivotal moment here being the decision in *Marquette Nat'l Bank v. First of Omaha Serv. Corp.*, 439 U.S. 299 (1978), which found, as a matter of statutory interpretation (of the National Banking Act, 12 U.S.C. § 85 (2012)), that national banks were subject to the usury laws of the state in which they were incorporated, not the state in which the loan was issued. After this decision, banks began to incorporate in states without usury laws (such as South Dakota), effectively rendering state usury laws obsolete in the great majority of lending. See HYMAN, *supra* note 1, at 244–47.

81. During the 1980s, credit cards and other loans were increasingly financed through securitization, which both tapped international capital markets to finance consumer loans and brought a substantial number of loans off the balance sheets of banks, effectively avoiding interest rate caps and capital requirements. See GEISST, *supra* note 78, at 85–91; HYMAN, *supra* note 1, at 260–62.

82. In simplistic summary, consumer credit at midcentury was mostly for the upwardly mobile middle class, by the 1990s it had become an expensive safety net. See, e.g., GEISST, *supra* note 78, at 18–23; HYMAN, *supra* note 1, at 283.

83. To cite just two examples, the falling barriers between investment and commercial banks (among other things) created the space for tapping the global investment market to finance consumer credit, see, e.g., Gramm-Leach-Bliley Act, 12 U.S.C. § 1811 (2012) (fully repealing Glass-Steagall's separation between commercial and investment banking); GEISST, *supra* note 78, at 75–77 (summarizing deregulation), and the government took at least nominal steps towards expanding consumer finance to underserved communities, see Community Reinvestment Act, 12 U.S.C. § 2901 (2012).

84. For instance, CRAs have moved from presenting basic probability of default information to advising lenders on “optimal pricing strategies for a given portfolio,” Mark Furletti, *An Overview and History of Credit Reporting* (Fed. Reserve Bank of Phila., Discussion Paper, 2002), and attempting to target borrowers more likely to revolve rather than default, see HYMAN, *supra* note 1, at 243.

85. Finlay points out that “there are few, if any, independent studies which can be said to have compared credit scoring and judgemental [sic] lending in a truly objective manner in an operational lending environment.” FINLAY, *supra* note 10, at 151. There are no studies, and consumer lending grew at an unprecedented clip, in large part due to the expansion of credit scoring, until it basically saturated the market (indeed, credit card expansion would likely have been impossible without it). It is reasonable to conclude that much of the difficulty in measurement is due to a lack of clear comparison group. See BARRON & STATEN, *supra* note 10, at 8–11 (discussing the blistering credit-report-fueled growth of the consumer lending market in the U.S.).

credit reporting (in whatever form) has served to even out information asymmetries.⁸⁶ There is by now little question that credit scoring outperforms judgmental evaluation of creditworthiness.⁸⁷ Although this fact does not mean that credit scoring is by any means optimal, it does mean that it represents an improvement over the underwriting that came before. Such an improvement makes pricing for risk easier and more accurate (even if other factors do as well), which should contribute to a number of the results predicted in the model. It is also undeniable that the automation of credit scoring makes decisions faster and cheaper,⁸⁸ which, absent countervailing factors, should increase competition and facilitate easier access to credit. As for the question of the expansion of access:

[V]ery little research has been conducted into the bias expressed by credit scoring systems, but what work has been undertaken has concluded that there is not much support for the argument that discrimination exists...even if credit scoring systems do display bias which might be considered in some way unfair or unethical, it is of a lower order than what went before.⁸⁹

This rosy view is not shared by all, and even its author has doubts. In a separate passage he notes that “a representative of a well-known organization for whom a scorecard was being developed [likely in Britain], asked [him, a credit score creation expert] to ensure that the scorecard generated very low scores for anyone of a certain nationality.”⁹⁰

Combine this evidence about credit scores with the evidence that consumer credit markets have used more risk-based pricing,⁹¹ have expanded more or less exponentially, and have begun to lend to the previously excluded,⁹² and one finds at least a correlation between more and more accurate credit reports and many of the predicted results of the above models. Even if credit scores cannot be pointed to as a cause of many of these phenomena, they can be seen as a facilitator: while other factors may make risk-based pricing more desirable, accurate credit scoring can make it more feasible.

Despite indications that credit scores have contributed to more efficient and deeper-rooted consumer credit markets, other research has raised questions about the relatively simple model articulated above. Much of this research demonstrates how the actual practice of credit scoring has more hitches than the neoclassical picture portrays. For instance, credit reports have been found to

86. Pagano & Jappelli, *supra* note 31, at 1711–13.

87. FINLAY, *supra* note 10, at 151–53, 181–86 (providing much of the evidence for this assertion).

88. *Id.* at 152.

89. *Id.* at 164.

90. *Id.* at 153.

91. See generally GEISST, *supra* note 78, at 65–73 (discussing the expansion of portfolio theory and risk-based pricing).

92. E.g., FINLAY, *supra* note 10, at 164.

contain a large number of errors. Recent studies on the subject found that around nineteen percent contained material errors, with more and more damaging errors for individuals with lower credit scores.⁹³ Dispute resolution, the main process through which inaccuracies can be corrected, has been criticized for its unresponsiveness and bias against consumers.⁹⁴

Other research calls into question whether consumer lending operates the way the neoclassical model suggests it does, which would make the model at least incomplete. One example is the evidence that CRAs make much of their money by helping lenders target their marketing to borrowers who are likely to revolve—that is, to remain in a constant state of debt, taking out loans in part to pay for previous loans—which makes the lending decision part of the business relatively less important.⁹⁵ If credit scores are being used for targeting vulnerable borrowers⁹⁶ rather than efficiently pricing for borrower risk, then models that suggest the latter need to be re-thought. Another line of evidence—in need of considerably more elaboration—focuses on the institutional context in which credit reporting and scoring take place. Whereas in the United States CRAs are oligopolistic corporations, in some countries credit reporting is done by the government or via a public-private partnership.⁹⁷ The neoclassical model discussed above treats information sharing as a more-or-less frictionless process, but it may make a great deal of difference how credit reporting is done, and by whom.

While these and other critiques of the neoclassical model must be taken seriously in order to undertake anything like a complete analysis of credit reporting, for the remainder of the paper I assume them away to keep the focus steady on vicious cycles and inequality.

93. FTC Report, *supra* note 13, at 38 (providing the nineteen percent figure); TURNER, VARGHESE & WALKER, *supra* note 10, at 8 (providing the twelve percent figure); *see also Equal Employment for All Act: Hearing on H.R. 3149 Before the H. Comm. on Fin. Insts. & Consumer Credit*, 111th Cong. 6 (2010) (statement of Chi Chi Wu, National Consumer Law Center).

94. *See, e.g.*, CFPB REPORT, *supra* note 12, at 27–35.

95. *Cf.* FED REPORT, *supra* note 39, at 30 (“Experience in credit card marketing indicates that the consumers most likely to respond to an unsolicited credit offer are generally those least likely to repay, so prescreening also seeks to rank-order likely respondents by repayment probability.”); FINLAY, *supra* note 10, at 186 (“[T]he credit referencing component is becoming an increasingly smaller part of the credit reference agencies’ wider commercial operations.”); HYMAN, *supra* note 1, at 266–68 (discussing the switch in business model from fees to targeting revolvers through aggressive marketing).

96. For one model of how this might work even without bringing marketing into the picture, *see infra* Part IV.C.

97. NICOLA JENTZSCH, FINANCIAL PRIVACY: AN INTERNATIONAL COMPARISON OF CREDIT REPORTING SYSTEMS 62 (2d ed. 2006) (“UK is a private system, Germany is a dual one and France is a public system with no private bureaus.”). This book contains the beginnings of a comparative analysis of credit reporting within different institutions, but much more work remains to be done. *See also* FREMSTAD & TRAUB, *supra* note 12, at 6 (arguing that public CRAs are often more accurate and operate at lower cost).

IV.

THE FIRST VICIOUS CYCLE: CREDIT MARKETS

In carrying out the ideal of equal access to credit, modern credit reporting removed all borrower characteristics from consideration except for those related to past and present experience with consumer credit. What this means is that borrowers who reliably pay off their past debts will find cheaper borrowing possibilities open to them. Conversely, of course, borrowers who have failed to pay back their debts in the past will find their future options limited to high interest loans. But more expensive loans are more difficult to pay back, so these borrowers will be presented with loans that they may have more trouble paying back. Furthermore, borrowers at the bottom end of the credit market make easier targets for predatory loans—that is, loans that mislead borrowers into paying more than they expected, often to the point of being unable to fully pay off the debt.

Although the likelihood of sorting borrowers into categories that are to some degree self-reinforcing may not be inherently worrying, the reality of who is likely to be at the bottom end of the credit score spectrum—and who at the top—provides cause for concern. Aside from the near eradication of gender inequality in the lending market, the same groups of people who were at the bottom end when equal access to credit advocates demanded change remain there today.

The causes of inequality, however, have changed. In the relatively widespread income growth still in effect at midcentury, taking on mainstream consumer debt was a means of accelerating the acquisition of middle class comforts; thus, being prevented from accessing such debt was to be denied a share of the good life. In the contemporary U.S., though, “Americans’ personal debt problem [has] resulted not from a choice to borrow but from the rising inequality of income and wealth that had occurred since the 1970s, even as capitalist expansion relied on increasing consumption in an era of declining wages.”⁹⁸ The result is that those consigned to the bottom end of the credit market tend to be those who have been forced to borrow to pay for an unexpected expense or merely to supplement insufficient or nonexistent incomes. Thus, credit reports’ contribution to the first vicious cycle frequently has the opposite effect of that intended by the ideal of equal access to credit: it compounds disadvantage rather than making it easier to escape.

A. Modeling the Vicious Cycle

We maintain the same assumptions discussed in Part III.A of rational actors and competitive markets with only enough information asymmetries to make (accurate) credit reporting a sensible intervention. Let us begin with a set of one hundred borrowers with the same credit score who have never borrowed before. Each borrower takes out a \$1000 installment loan from the same bank at a 5%

98. HYMAN, *supra* note 1, at 283.

interest rate. Over the course of ten months, each of the borrowers behaves differently. Some borrowers pay back the loan in full, making every payment on time. Some come up short on a few payments but make up for it later and pay the loan back on time. Some are late on multiple payments and have not paid back the loan. Some have defaulted outright. It will later become important why these borrowers acted differently, but for now let us suppose that their actions had random causes. Because of their varied actions, at the end of the ten months the borrowers' credit scores are no longer identical. Ten borrowers have a credit score of 350, ten have a credit score of 400, ten have a credit score of 450, and so forth up to a score of 800, with each group of ten borrowers separated by 50 points.⁹⁹

Two months later (a year since they took out the original loan) the borrowers all apply for another \$1000 loan from the same bank. Looking at their credit scores the bank prices the loans based on risk. As a result, the bank offers different interest rates to each borrower. The ten with a credit score of 350 are offered a 20% interest rate, those with a credit score of 400 are offered an 18% interest rate, those scored at 450 are offered 16%. This trend continues, such that those with a credit score of 800 are offered a 2% interest rate. All of the borrowers accept their respective loans because they know they have gotten the best rate the market will give them (given their credit scores) and value \$1000 now more than the interest rates will cost them.

After ten more months, the loan should be fully paid off. Assuming, as we are, that credit scores reflect the risk of lending to a particular borrower with a good degree of accuracy (which requires past borrowing behavior to be predictive of future borrowing behavior),¹⁰⁰ the borrowers who behaved adversely—i.e. defaulted, paid late, missed payments, etc.—on the first loan are more likely to do so again on the second loan. This is the risk the bank has priced for. In pricing for this risk, however, the bank has actually exacerbated the riskiness of the borrowers with low credit scores.

A high-interest loan is more difficult to pay off than a low-interest loan. Thus, the borrowers who take out a second loan at a higher interest rate will be more likely to behave adversely by virtue of the nature of the loan itself. This is an increased likelihood over and above the increased likelihood based on the characteristics manifested in past borrowing behavior. Each increase in interest rate makes it marginally more likely that borrowers will have trouble paying

99. Credit scores are not likely to move so dramatically based on borrowers' behavior with respect to a single loan over a ten-month period (especially given recent changes to the FICO algorithm that make a single adverse action count for less than a pattern of adverse actions), but this simplification should not alter the underlying point to be made in this Part, which, in any case, is full of simplifications.

100. Ultimately borrower behavior presents not just *risk* but immeasurable *uncertainty*. Here we need only assume that credit scores serve the pragmatic end of accounting for a sufficient portion of the variance in borrower behavior that they allow for more accurate pricing of risk than any other alternative.

back a loan, even holding constant the characteristics of the borrowers to whom a loan is offered.

A further sorting of borrowers takes place over the course of this loan. Some borrowers who behaved adversely with the first loan make every payment on time on the second loan, raising their credit score. The converse also occurs. But, as just established, the net result is that borrowers who behaved adversely on the first loan behave worse on the second loan—both because of characteristics reflected in their credit score and because of the burdensome terms of the loan that their credit score restricted them to. Borrowers with low credit scores end up, on average, with even lower credit scores.

Now suppose the borrowers all apply for a third \$1000 loan. The same sorting that took place in the second round repeats in the third. Borrowers with lower credit scores are offered loans with higher interest rates, which makes them more likely to act adversely, which further lowers their credit score.¹⁰¹ Borrowers who paid higher interest rates in the second round of lending have the further disadvantage of having less money than borrowers who paid lower interest rates, rendering them all the more likely to behave adversely.

As this lending process iterates further, borrowers will continue to sort according to their tendency and ability to repay and their past behavior's effects on current loan terms, as mediated through credit scores. At some point the loan terms offered to borrowers with low credit scores will be too expensive, depending on each borrower's individual valuation of the loan. These borrowers will be priced out of the market. Note, however, that to the extent that high interest rates eat away at risky borrowers' funds, these borrowers are likely to take out more money when they take out a loan (since they have more of a shortfall to fill in) and to value loans more, reducing the price elasticity of their demand and delaying the point at which they are priced out of the market.¹⁰² Until low-credit-score borrowers are priced out of the lending market, their loan prices will keep going up—in theory to the point where they are one hundred percent likely to default but, in practice, until some threshold is reached at which the lender will either refuse to lend to such high-risk borrowers or will ignore the additional risk.¹⁰³ The amount of risk caused by risk-based pricing will likely

101. At some point, the marginal contribution of loan risk to probability of adverse behavior will be outweighed by other factors.

102. These effects will depend on, among other things, each borrower's expectations of future income, i.e. their means of paying off the loans. However, even if a borrower has reason to think that she will have insufficient funds to pay off the loan in the future, if that borrower has a strong need/desire for money in the short term, she will value the loan at more than the cost of the risk of default.

103. Cf. FINLAY, *supra* note 10, at 158 ("In theory . . . [e]ven if the chance of default is extremely high, if the interest rate is high enough it should be possible to make a return on investment averaged over a large number of similarly risky individuals. In practice, the rate at which interest would need to be charged on the most risky groups in society could be 100 percent or more, where the chance of default could be as high as one in two or worse Most lenders are also aware of their duty to act as responsible lenders . . .").

diminish as borrowers' interest rates become higher and higher, because the riskiness of other aspects of issuing the loan to the class of borrower who will be offered such a high cost loan will overwhelm loan risk. Exactly when this occurs depends on the relative contribution of loan risk to the overall riskiness of lending a loan to particular classes of borrowers.¹⁰⁴

So far I have been assuming that loan risk is priced for ex post, after it exerts its influence on debtor behavior, but it is possible, at least in theory, to price for the risk of nonpayment a high-priced loan creates ex ante, either indirectly or directly. Pricing for loan risk occurs indirectly since credit-scoring algorithms are created based on data from thousands of borrowers, most of whom are offered loans with risk-adjusted pricing. Although the risk presented by high-cost loans is not isolated as a factor determining non-payment in the ultimate algorithms, it likely makes its influence manifest indirectly by amplifying the magnitude of default risk associated with several borrower characteristics (through much the same mechanism described in the above model).¹⁰⁵ The direct pricing of risk takes place when lenders engage in a more thorough form of underwriting that supplements credit scores with information about how much, on average, raising the price of a loan will increase the probability of default on that loan. Pricing for loan risk ex ante will move forward in time the point at which the marginal contribution of loan risk on overall risk-based pricing diminishes to effectively nil.

On the simplest model, the vicious cycle can be stopped before it starts, if loan risk is entirely accounted for ex ante.¹⁰⁶ Lenders who have entirely accounted for how the terms of the loans will affect default will not gain any new information when more borrowers default who have higher interest loans. However, in a model more closely representing actual practice there are two reasons that ex ante pricing for loan risk will not completely prevent the vicious cycle. First, the effect of loan risk on different borrowers cannot be entirely accounted for ex ante. Borrower behavior over the course of the loan will reveal new information about how loan risk affects different borrowers differently—information that will have to be priced for in the next round of lending. Second,

104. On average, a group of borrowers with a high interest rate will be more likely to default than a group of borrowers with a lower interest rate. Lenders can price for the risk of a higher interest rate only by raising the interest rate, which will, of course, raise the risk of default even higher. It is ultimately an empirical question whether or not this process continues until interest rates force borrowers into one hundred percent chance of default, but the more likely scenario is one where at some point other risks overwhelm the risk of raising interest rates. At this point, loan risk does not need to be priced for anymore—borrowers with slightly higher interest rates will not default more often than similar borrowers with slightly lower interest rates and thus the risk of the higher interest rate will not need to be priced for.

105. Anonymous former employee of the credit reporting industry.

106. Put formally: let D represent default risk. D is a function of both borrower characteristics, B , and loan characteristics, L . So: $D = D(B, L)$. Loan terms, in turn, are a function of default risk: $L = L(D)$. We thus have: $D = D(B, L(D))$. Or: $L = L(D(B, L))$. A lender with sufficient information would solve these equations and immediately get the end-state L and D .

a high-priced loan increases probability of default in different ways—by making the monthly payments harder to meet, by making debtors poorer, and sometimes by increasing the length of the loan. These different increases in the probability of default are accounted for by different institutional actors: the difficulty of repaying itself is accounted for by lenders insofar as they price *ex ante*, while the effect of a more expensive loan on borrowers (in the form of fewer resources, more loans taken out, etc.) is accounted for by CRAs. This matters because even if lenders were to take into account all relevant information *ex ante*, CRAs would still take into account (certain) information *ex post*, which would affect future borrowing.

To summarize the model I have just sketched: risk-based pricing serves to amplify the differences in riskiness presented by lending to different borrowers. Borrowers who present a greater risk will be offered harder-to-pay loans both to account for the characteristics that made that class of borrowers riskier and to account for the fact that the loans themselves are harder to pay. This is simply efficient pricing: lenders raise interest rates to account for the increased cost of lending high-interest loans to risky borrowers. Lenders can do so *ex ante*, using whatever information they have about how interest rates increase riskiness, and/or *ex post*, responding to the higher average default rate of borrowers with higher-interest loans (as expressed in credit scores). The vicious cycle occurs when lenders do so *ex post*.

*B. Cui Malo?*¹⁰⁷

From one perspective, the vicious cycle is just a delay in the process of settling into equilibrium pricing. In order to avoid adverse selection, risky borrowers must be given higher-interest loans. That the higher interest rate a risky borrower is given itself carries some risk only matters insofar as that risk must also be priced for. Yet because interest rates themselves contribute to the probability of default, things are not so simple. The vicious cycle may be a delay in the process of settling into equilibrium pricing, but there is a spectrum of possible equilibria. On one end, there is a less of a spread between high- and low-price loans and there are lower default rates even among the riskier borrowers. On the other, lenders set high prices for the riskiest borrowers, leading to correspondingly higher default rates. Which equilibrium is reached will be in part path dependent: early decisions about how to price risk will limit later decisions about the same. How much variance can be accounted for by the loan-pricing models will also factor in—the more predictive they are with less information, the better the possibility of separating out different default risk factors and pricing for them more accurately. Both high-price and low-price equilibria are efficient in the sense that the price of the loan will equal the cost

107. “Bad for whom?”

to the lender in both scenarios. In order to evaluate the difference between them, then, it makes sense to look at more than just the criteria of allocative efficiency.

One further thing to consider is the punitive element of offering only high-cost loans to borrowers with low credit scores. Borrower riskiness depends on past borrower behavior, so giving worse loan terms to those with low credit scores amounts to creating consequences for “bad” borrowing. Within the neoclassical model outlined above, this was presented as an upside of risk-based pricing: it helps to diminish moral hazard by forcing borrowers to internalize the cost of their adverse actions. But whether the threat of raising loan price can deter adverse action or not depends on what leads the borrower to default. Although in theory credit reports and scores could disaggregate the reasons for each adverse borrower action, as discussed above, in practice they do not, perhaps because it is too costly or perhaps because CRAs do not have access to that information.

As such, three basic possibilities present themselves. For borrowers who default opportunistically—thinking that in doing so they will end up with free and consequence-free money—the threat of a damaged credit score and the worse loan terms that come with it might serve as a deterrent. Borrowers who default negligently—forgetting to pay the loan or mismanaging money¹⁰⁸—might be less likely to do so on the margin if the consequences of doing so include a damaged credit score. If they are not aware of the effects of defaulting, though, then the threat of a low credit score will not deter. Borrowers who default helplessly—because of exogenous shocks or other bad luck (think of poor Antonio, his sinking ships, and his threatened pound of flesh)—will not be deterred since their default is to a large degree out of their control.

Even if all borrowers who default do so intentionally, making deterrence relatively effective, the punitive element of high interest rates causes harm for those who are not deterred. The harm itself may be justifiable in the same way that the harm of any reasonable punishment can be, but the vicious cycle adds an additional twist. For borrowers caught in the vicious cycle, a past mistake becomes more and more difficult to move beyond. It is a sort of anti-rehabilitation: a form of punishment that continuously increases the difficulty of reforming one’s behavior and continues to ramp up in intensity even if one’s defaulting behavior is no longer intentional. This analysis applies similarly for borrowers who default negligently, but the deterrent effect is weaker, since punitive consequences only have their incentive effect by increasing the saliency of the need to repay. The anti-rehabilitationist consequences of the vicious cycle also affect borrowers who default helplessly, but for them the punitive element causes harm with no deterring upside.

108. A fully rational borrower would not behave this way. This does not comport with a strong neoclassical model of borrower behavior, but on a weaker evolutionary model—where borrowers on the aggregate behave as if rational, even if there are some outliers—irrational borrowers can be incorporated.

C. Marking the Prey for Predatory Loans

Predatory loans add additional twists. A predatory loan is a credit product that takes advantage of its purchasers through some form of deceit. The clearest case of such a loan is one that involves fraud or some other form of outright lying that would mislead even a rational borrower into thinking she was getting something more valuable for less money than she actually was. Although a borrower who fails to fully repay a fraudulent loan may also be less likely to repay an above-board loan, there are both practical and moral reasons to think that one's performance on a fraudulent loan should alter the terms on which one can take out a legitimate loan. Namely, a fraudulent loan presents much more loan risk—skewing the ability to predict the behavior of the borrower—and punishes a borrower for something she could not have prevented.

Fortunately fraud is illegal, even if it has not been eliminated. But another set of loans sit on the borderline of legal and illegal that can also be seen as predatory. Insights from behavioral economics provide a way to conceptualize them. When loans are predatory, behavioral economists tell us, they prey on the limited information and limited cognitive abilities of borrowers. Lenders structure these loans such that boundedly rational borrowers perceive them as costing less and/or being worth more than they truly are.

Two of the most common facets of loan structure that prey on bounded borrower rationality are complexity and deferred costs.¹⁰⁹ Faced with a complicated loan structure, a bounded rational borrower will “simplif[y] his decision by overlooking non-salient price dimensions [and] approximate[], rather than calculate[], the impact of the salient dimensions that cannot be ignored.”¹¹⁰ That is to say, the borrower will deal with a complicated loan contract by roughly estimating the costs and benefits of the portions he finds easiest to comprehend or thinks most important to his lending decision, ignoring the other portions. Although a rational borrower will likely assume that ignored terms are pro-lender, a boundedly rational borrower may even “naively assume that they are favorable” to him.¹¹¹ With regards to a deferred-cost loan, a boundedly rational borrower will roughly estimate “non-contingent, short-run costs” while systematically underestimating “contingent [and/or] long-run costs.”¹¹²

Without regulatory intervention,¹¹³ a market containing boundedly rational borrowers would be one in which predatory lenders outcompete scrupulous

109. OREN BAR-GILL, *SEDUCTION BY CONTRACT* 17 (2012).

110. *Id.* at 18–19.

111. *Id.* at 21.

112. *Id.*

113. The right form of regulatory intervention in consumer credit markets is very much up for debate. Oren Bar-Gill proposes more easily understood disclosures, along with disclosures that help borrowers calculate their own likely usage rates. BAR-GILL, *supra* note 109, at 32–42. Other “libertarian paternalists” support various “nudges” that make it easier for borrowers to choose the right loans. The recent work by Ryan Bubb and Richard Pildes undermines the idea that regulation in consumer lending markets can rely on more sophisticated disclosures. *See* Ryan Bubb &

lenders.¹¹⁴ Lenders will compete only on the terms borrowers focus on—i.e. salient, short-term costs—and will compensate for their below-cost salient short-term provisions by driving up the costs of non-salient long-term provisions. Any lender who attempts to price for all costs up front will lose market share to lenders who backload costs, since borrowers will only perceive the former as more expensive rather than less predatory.

Most markets do not contain solely boundedly rational or solely rational borrowers. A growing amount of empirical evidence indicates that more sophisticated borrowers are less likely to take on predatory loans.¹¹⁵ A parallel literature shows that borrowers of color, low-income borrowers, female borrowers, and less educated borrowers are all more likely to be targeted for predatory loans.¹¹⁶ One line of evidence that connects these groups to areas of empirical study shows that African Americans tend to be less knowledgeable about how credit works and more chary of it.¹¹⁷ Low-income and less-educated borrowers are also likely to have less time to contemplate loan terms and less access to somebody who can advise them.¹¹⁸ The burden of predatory loans falls, along with other burdens examined in this paper, on the most economically precarious.

Credit scores have been of major importance in facilitating the usage of predatory loans. Most obviously, the difference between prime and subprime borrowers—the latter of whom having been targeted for predatory loans much more frequently—is determined in large part by credit score. A full discussion of the role that CRAs play in the predatory lending market, though essential for a full account of the welfare implication of credit scoring, is beyond the scope of this article.¹¹⁹ I limit myself to the beginnings of the analysis.

Predatory loans help to initiate and exacerbate the vicious cycle. Borrowers who have fallen prey to predatory loans are more likely to have low credit scores,¹²⁰ for instance, and to default on existing loans.¹²¹ These are the familiar

Richard H. Pildes, *How Behavioral Economics Trims its Sails and Why*, 127 HARV. L. REV. 1593 (2014). They recommend more intrusive regulation, such as banning teaser rates and setting price ceilings/floors. *Id.* at 1658–1662; *see also* Michael Barr, Sendhil Mullainathan & Eldar Shafir, *The Case for Behaviorally Informed Regulation in NEW PERSPECTIVES ON REGULATION 25* (David A. Moss & John A. Cisternino eds., 2009) (discussing both less intrusive and more intrusive forms of regulation, favoring more intrusive forms that “change the scoring”).

114. Barr, Mullainathan & Shafir, *supra* note 113, at 24–25.

115. *Id.* at 160–64.

116. *Id.* at 172–73.

117. Sheila D. Ards & Samuel L. Myers, Jr., *The Color of Money: Bad Credit, Wealth, and Race*, 45 AM. BEHAV. SCIENTIST 233, 233–34 (2001).

118. Maria Konnikova, *No Money, No Time*, N.Y. TIMES (Jun. 13, 2014), <http://opinionator.blogs.nytimes.com/2014/06/13/no-clocking-out/>.

119. Especially relevant questions to answer here would be whether CRAs' role in the creation of marketing materials facilitates the targeting of vulnerable borrowers and whether their development of behavioral scoring assists lenders in squeeze revolving debtors dry.

120. Almost by definition, since predatory loans tend to be concentrated among borrowers with lower credit scores. *See* Lisa Rice & Deirdre Swesnik, *Discriminatory Effects of Credit*

forms of vicious-cycle facilitation mapped out above. But the analysis becomes richer if we modify the model to consider predatory loans and their necessary precondition, bounded rationality.

To the extent that low credit scores reflect past experience with predatory lending, they can serve as a proxy for borrower vulnerability and help lenders target predatory loans towards those borrowers.¹²² When presuming borrower rationality, at least within the credit market in which credit scores are being used, lenders have no reason to think that borrowers with low credit scores were any different from other borrowers apart from their lower likelihood of repayment. Lenders might refuse to provide such borrowers credit without raising interest rates to price for risk, but they have no reason to treat them any differently otherwise. Absent the presumption of borrower rationality and with the knowledge that different borrowers exhibit different levels of rationality, lenders have a reason to treat borrowers with low credit scores differently. Not only will they inadvertently perpetuate the low-credit-score-high-interest-rate vicious cycle, they will intentionally perpetuate the even more vicious low-credit-score-predatory-loan cycle.

Even if low credit scores do not accurately reflect the cognitive vulnerabilities of their bearers, predatory loans will be especially effective at capturing borrowers with low credit scores for a different reason. To see why, let us assume that cognitive biases are evenly distributed along the range of credit scores. At the low end of credit scores, all borrowers will be offered expensive credit. To boundedly rational borrowers in this part of the market, predatory loans will look quite cheap when contrasted with the very expensive credit surrounding them. The contrast will not be as clear at the high end of credit scores, where all loans are relatively inexpensive. Thus, it will be easier for predatory lenders to outcompete fair lenders with borrowers who have lower credit scores even if these borrowers are not disproportionately irrational. Indeed, in some markets predatory loans may be the only reasonably available possibility for borrowers with low credit scores. Studies of lending patterns during the subprime bubble have suggested that certain originators specialized in

Scoring on Communities of Color, 46 SUFFOLK L. REV. 935, 953–55 (2013) (discussing several ways that racism forces African Americans' credit scores down); Jonathan S. Spader, *Beyond Disparate Impact: Risk-Based Pricing and Disparity in Consumer Credit History Scores*, 37 REV. BLACK POL. ECON. 61, 63 (2010) (“[D]isparities in credit score outcomes may emerge as a result of the concentrated lending activities of brokers and subprime lenders, even in the absence of discrimination.”).

121. E.g., Sumit Agarwal, Gene Amromin, Itzhak Ben-David, Souphala Chomsisengphet & Douglas D. Evanoff, *Predatory Lending and the Subprime Crisis*, 113 J. FIN. ECON. 29 (2014) (finding that predatory loans raised mortgage default rates by about one third in Chicago).

122. Credit scores are likely to be a noisy proxy for past experience with predatory lending, but, aside from the obvious reason, there are two reasons to think that they could do a good job: (1) characteristics of borrowers most likely to fall victim to predatory lending overlap significantly with characteristics of borrowers with low credit scores, and (2) even if credit scores don't do the trick, supplementing with a quick look at a credit report could, since lenders could then see if a borrower had a history with predatory loans.

predatory loans and offered their services mainly in areas where most borrowers had low credit scores.¹²³

Through credit scores, then, a history with predatory lending can persist and repeat. Only this initial insight is needed for a general analysis of the vicious cycle, but it is worth noting, again, that it is only the beginning of an account of the relationship between predatory lending and credit scores.

V.

THE DEBT SAFETY NET AND DISCRIMINATION'S REVERBERATIONS

Evidence from a variety of sources indicates that much of the “bad” borrower behavior that leads to low credit scores can be traced to structural sources rather than character flaws in individual borrowers. Unequal resource distribution, enduring discrimination, and predatory lending with impunity all contribute to relegating a class of consumers to the bottom of the consumer lending market. That high interest rates pile on top of these systemic harms which themselves can take the form of vicious cycles triggers distributional concerns on top of the anti-rehabilitationist and non-deterring concerns mentioned in Part IV.B. A large spread in interest rates in the context of deep inequalities may contribute to the creation of a financial underclass. Predatory lending is one cause of these ongoing inequalities. The varieties of racial injustice as well as the offloading of more and more risk onto the poor and the middle class are another.

Over the past forty years, the average U.S. household has fallen deep into the red. From 1980 to 2009, average household debt has almost perfectly doubled.¹²⁴ During this same period of time, income and wealth inequality have waxed just as dramatically.¹²⁵ These two phenomena are not unconnected. “[A]lmost all of the increase in the aggregate debt-to-income ratio [between 1983 and 2007] is due to the bottom group of the income distribution.”¹²⁶ As incomes for the great majority of consumers stagnated in real terms (and without

123. See Patrick Bayer, Fernando Ferreira & Stephen L. Ross, *Race, Ethnicity and High-Cost Mortgage Lending* (Nat'l Bureau of Econ. Research, Working Paper No. 20762, 2014) (finding racial and ethnic differences in borrower characteristics mostly attributable to across-lender differences).

124. GÉRARD DUMÉNIL & DOMINIQUE LÉVY, *THE CRISIS OF NEOLIBERALISM* 150 (2011); Catherine Rampell, *How Much Debt Should Households Have?*, N.Y. TIMES (Aug. 4, 2010), http://economix.blogs.nytimes.com/2010/08/04/how-much-debt-should-households-have/?_php=true&_type=blogs&_r=0.

125. THOMAS PIKETTY, *CAPITAL IN THE TWENTY-FIRST CENTURY* 294, 348 (Arthur Goldhammer trans., 2014). As Piketty notes, these figures have been seen as rough approximations and likely underestimates, given uncertainties in measurement and the increased ease of hiding wealth. See *id.* at 466.

126. Michael Kumhof, Romain Ranci re & Pablo Winant, *Inequality, Leverage and Crises*, 105 AM. ECON. REV. 1217, 1221 (2015).

a sufficient increase in exports to offset),¹²⁷ “[t]o obtain a normal use of productive capacity, a proportionally larger increase of consumer debt was required.”¹²⁸ The result, when combined with the increasing instability of income, is what a variety of authors have called “the privatization of risk.”¹²⁹

While federal and state governments have failed to fill the gap between what households earn and what they must spend—they have in fact rolled back substantial portions of the social safety net¹³⁰—what has filled the gap, especially for those without family wealth to draw from, has been consumer credit. Each individual household is forced to “take upon itself the costs and risks externalized by the State and corporations.”¹³¹ Income instability has been found to correlate with bankruptcy¹³² and increased credit card debt.¹³³ A bevy of research has indicated that medical debt has an outsized place in credit card balances, bankruptcies, and other manifestations of financial stress.¹³⁴ A recent study found that forty percent of low- and middle-income households use credit cards “to pay for basic living expenses such as rent, mortgage bills, groceries, utilities, or insurance...because they did not have enough money in their checking or savings accounts.”¹³⁵ Major family changes like having a child or getting a divorce have also been associated with increased indebtedness.¹³⁶ Education debt has been the only form that has continued to rise, in complete

127. How exactly to measure income in “real” terms rather than nominal terms is a matter of judgment, but all indications are that, at the least, the incomes for most Americans grew at a much lower rate than incomes for the top decile. *E.g.*, *Stagnation for Everyone*, ECONOMIST (Sep. 17, 2013), <http://www.economist.com/blogs/freeexchange/2013/09/incomes>; Elizabeth Warren, *Rewriting the Rules: Families, Money and Risk*, PRIVATIZATION RISK (Jun. 7, 2006), <http://privatizationofrisk.ssrc.org/Warren/>.

128. DUMÉNIL & LÉVY, *supra* note 124, at 167.

129. JACOB S. HACKER, THE GREAT RISK SHIFT 27 (2006); JACOB S. HACKER & ELISABETH JACOBS, ECON. POLICY INST., BRIEFING PAPER NO. 213, THE RISING INSTABILITY OF AMERICAN FAMILY INCOMES, 1969-2004 (2008), <http://www.epi.org/publication/bp213/>.

130. *See generally* GOLDBERG & COLLINS, WASHINGTON’S NEW POOR LAW (2001); HACKER, *supra* note 129.

131. MAURIZIO LAZZARATO, THE MAKING OF THE INDEBTED MAN 51 (2011).

132. Elizabeth Warren, *Financial Collapse and Class Status: Who Goes Bankrupt?*, 41 OSGOODE HALL L.J. 115, 127 (2003).

133. AMY TRAUB & CATHERINE RUETSCHLIN, DEMOS, THE PLASTIC SAFETY NET: FINDINGS FROM THE 2012 NATIONAL SURVEY ON CREDIT CARD DEBT OF LOW- AND MIDDLE-INCOME HOUSEHOLDS 1 (2012).

134. ROBIN A. COHEN & WHITNEY KIRZINGER, NAT’L CTR. HEALTH SERVS., DATA BRIEF 142, FINANCIAL BURDEN OF MEDICAL CARE: A FAMILY PERSPECTIVE (2014); JOSÉ GARCIA & MARK RUKAVINA, DEMOS, SICK AND IN THE RED: MEDICAL DEBT AND ITS ECONOMIC IMPACT (2009); HACKER, *supra* note 129, at 138; OLIVER & SHAPIRO, *supra* note 16, at 214; AMY TRAUB, DEMOS, DISCREDITED: HOW EMPLOYMENT CREDIT CHECKS KEEP QUALIFIED WORKERS OUT OF A JOB 6, 7 (2013); Melissa B. Jacoby, Teresa A. Sullivan & Elizabeth Warren, *Rethinking the Debates Over Health Care Financing: Evidence from the Bankruptcy Courts*, 76 N.Y.U. L. REV. 375 (2001).

135. TRAUB & RUETSCHLIN, *supra* note 133, at 1.

136. HACKER, *supra* note 129, at 91, 101, 106.

disregard of the 2007 financial collapse.¹³⁷ Housing remains, of course, the main driver of consumer debt.¹³⁸

Although the empirical evidence is underdeveloped on how the use of debt as a safety net affects credit scores, what evidence there is indicates that the use of debt to fund everyday or emergency expenditures (rather than to smooth spending over time) is associated with lower scores. Among low- and middle-income families in one survey, “[n]early half (45 percent) of those with credit scores below 620 say they have incurred expenses relating to the loss of a job in the last three years. This compares with just 19 percent of those with scores over 700.”¹³⁹ Poor credit has also been found to be associated with having children and having medical debt.¹⁴⁰ The growing number of defaults on student debt cannot help but affect the credit scores of alums.¹⁴¹ These associations make intuitive sense because the shortfalls associated with all of these factors would affect both the need to take out more debt¹⁴² and the inability to pay for already existing debt.

The basic way that debt-buttressed inequality can make economically precarious borrowers more likely to suffer the effects of the vicious cycle is by starting them off with lower credit scores, which can be enough to get the cycle going. But the impoverishing effects of the debt safety net can facilitate the vicious cycle in other ways. Especially when the need for funds is unexpected—in the case of a layoff or a medical emergency, for instance—the debt safety net is likely to make it more difficult to pay existing loans by piling on further loan obligations. On top of a liquidity shock’s effect on making existing debt more difficult to pay, the unexpected contingency of taking on new debt will also draw down resources. This will further push borrowers to behave in a way that will damage their credit scores, whether by taking on debt to pay off other debts, or

137. Halah Touryalai, *\$1 Trillion Student Loan Problem Keeps Getting Worse*, FORBES (Feb. 21, 2014), <http://www.forbes.com/sites/halahtouryalai/2014/02/21/1-trillion-student-loan-problem-keeps-getting-worse/>.

138. See DUMÉNIL & LÉVY, *supra* note 124, at 150. As these authors point out, “a fraction of mortgage loans is used to finance consumption expenditures” through home equity, so some of this is not strictly separate from non-mortgage debt. *Id.* at 151.

139. TRAUB, *supra* note 134, at 5–6. *But see* JENTZSCH, *supra* note 97, at 184 (reporting findings that areas with higher long-term unemployment have higher credit scores, possibly because of stricter lending standards).

140. TRAUB, *supra* note 134, at 6–7; *see also* *Equal Employment for All Act: Hearing on H.R. 3149 Before the H. Comm. on Fin. Insts. & Consumer Credit*, 111th Cong. 6 (2010) (statement of Chi Chi Wu, National Consumer Law Center); FREMSTAD & TRAUB, *supra* note 12, at 13; Jeremy B. Bernerth, Shannon G. Taylor, H. Jack Walker & Daniel S. Whitman, *An Empirical Investigation of Dispositional Antecedents and Performance-Related Outcomes of Credit Scores*, 97 J. APPLIED PSYCHOL. 469, 470 (2012).

141. *Default Rates Continue to Rise for Federal Student Loans*, U.S. DEP’T EDUC. (Sep. 30, 2013), <http://www.ed.gov/news/press-releases/default-rates-continue-rise-federal-student-loans>.

142. Taking out more debt does not in itself necessarily imply a lowered credit score (indeed, in many circumstances improves a credit score), but a higher debt load is one that is less likely to be paid, especially by somebody with an unstable source of income. On the other hand, a higher debt load *can* in itself lead to a lower credit score under the right circumstances.

by falling behind on payments. Credit scores can also be damaged simply by accruing too much debt or even by inquiring about taking on debt too frequently, making the sudden need to take out a loan more directly damaging to scores. Debt used to finance a necessity or to make ends meet in the face of an exogenous shock is, furthermore, likely to come in the form of a loan for which the price elasticity of demand is low. As a result, as interest rates rise for borrowers trapped in the vicious cycle, borrowers using debt as a safety net are less likely to take action to escape the cycle.

These dynamics play out especially poorly in a society that has still not remedied a long history of racist social policies.¹⁴³ Racism can be understood to damage the credit scores of African Americans by means of three mutually reinforcing categories of discrimination. First, the history of violence, exclusion, and restriction that is too long and complex to even attempt to touch on with any detail here. Focusing only on how this history has influenced wealth accumulation, sociologists Melvin Oliver and Oliver Shapiro divide it into three strands: the racialization of the state,¹⁴⁴ the “economic detour” (i.e. obstacles to black businesses),¹⁴⁵ and the “sedimentation” of inequality (i.e. the cumulative effects of era after era of white supremacist policy).¹⁴⁶ To their list might be added racist labor markets (where black workers have been prevented from participating, subjected to unspoken “last in, first out” policies, or paid less for the same work)¹⁴⁷ and a two-tier lending system perpetuated by geographic segregation.¹⁴⁸ All of these factors combine to put African Americans at a different starting line than other Americans.¹⁴⁹

Second, even moving past this starting line, one finds continuing racial inequalities in non-lending contexts, whether caused by overt discrimination or

143. I discuss here only the most devastating and the most lasting form of racial injustice in the United States—namely, the treatment of African Americans.

144. OLIVER & SHAPIRO, *supra* note 16, at 39–46.

145. *Id.* at 46–52.

146. *Id.* at 52–54.

147. See JANELLE JONES & JOHN SCHMITT, CTR. FOR ECON. POLICY RESEARCH, A COLLEGE DEGREE IS NO GUARANTEE 4 (2014) (showing that blacks unemployed at consistently double the rate of whites through 2013); Kenneth A. Couch & Robert Fairlie, *Last Hired, First Fired? Black-White Unemployment and the Business Cycle*, 47 DEMOGRAPHY 227 (2010) (discussing this theory and finding support for the “first fired” but not “last hired” part, in the contemporary world at least).

148. See Ards & Myers, *supra* note 117, at 238 (summarizing the reverberations of past and present lending discrimination); Patrick Bayer, Fernando Ferreira & Stephen L. Ross, *Race, Ethnicity, and High Cost Mortgage Lending* (U. Conn. Working Paper Series 2014-36, 2014) (showing racial differences in subprime lending).

149. “[T]he average Black household holds only about 17 to 25 cents of wealth for every dollar held by the average White family. . . . The median . . . Black family possesses only 8 to 13 cents of wealth for every dollar of wealth that the typical white family has.” N.S. Chiteji, *The Racial Wealth Gap and the Borrower’s Dilemma*, 41 J. BLACK STUD. 351, 352 (2010). See also OLIVER & SHAPIRO, *supra* note 16, at 134 (“Controlling for [every variable that has been found to be a stable predictor of wealth] still leaves African Americans with a \$27,075 disadvantage [compared to Whites]. . . . [T]he black NFA disadvantage remains substantial at \$14,354.”)

more subtle forms of racism. Although overt racism and even unjustified disparate impact discrimination are now officially illegal, labor market inequalities¹⁵⁰ and geographic segregation persist.¹⁵¹ Mass incarceration of African Americans, especially young black men, is a form of oppression of relatively recent vintage that has wreaked havoc on many black communities.¹⁵²

Third, lending discrimination in various forms—some old, some new—continues to be documented. Mortgage lending remains deeply unequal—the subprime lending crisis disproportionately affected black borrowers, with some such differences potentially due to targeting.¹⁵³ As banks have consolidated, small dollar loans have been left to the predatory practices of payday lenders and their ilk, which have also fallen disproportionately on the backs of black borrowers.¹⁵⁴ These lending patterns tend to happen in the same segregated neighborhoods, which compounds disadvantage.¹⁵⁵ Overall, “[e]ven though black families carry smaller monthly balances, a higher percentage of their financial resources goes toward servicing debt”¹⁵⁶ and “Blacks are heavily concentrated in those areas of the credit market with the highest costs and the fewest opportunities for establishing unblemished records.”¹⁵⁷

Most importantly for an analysis of credit reporting, all of these racialized disadvantages show up in credit scores. Researchers have reached a consensus that black borrowers have lower credit scores than white borrowers.¹⁵⁸ Even assuming that those lenders that use credit scores do not discriminate, all of the factors outside credit markets that lead black borrowers to have lower credit scores can make those borrowers more likely to face the vicious cycle. Low credit scores themselves make the vicious cycle more likely, and when a Black borrower is trying to pay off a loan faced with all of the above challenges and

150. See *supra* note 147.

151. See, e.g., Douglas S. Massey, Jonathan Rothwell & Thurston Domina, *The Changing Bases of Segregation in the United States*, 626 ANNALS AM. ACAD. POL. & SOC. SCI. 74 (2009).

152. See generally MICHELLE ALEXANDER, *THE NEW JIM CROW* (2010).

153. See *supra* note 148; Matthew Hall, Kyle Crowder & Amy Spring, *Variation in Housing Foreclosure by Race and Place, 2005–2012*, 660 ANNALS AM. ACAD. POL. & SOC. SCI. 217 (2015); Alan Pyke, *How Racial Discrimination in the Lending Industry Lingers Long After Foreclosure*, THINKPROGRESS (Apr. 9, 2014), <http://thinkprogress.org/economy/2014/04/09/3424765/housing-discrimination-middle-men/>.

154. See MEHRSA BARADARAN, *HOW THE OTHER HALF BANKS* 111–118 (2015) (situating small dollar lenders in with broader history of banking/lending changes); PEW CHARITABLE TRS., *PAYDAY LENDING IN AMERICA: WHO BORROWS, WHERE THEY BORROW, AND WHY* 10 (2012), http://www.pewtrusts.org/~media/legacy/uploadedfiles/pes_assets/2012/pewpaydaylendingreportpdf.pdf (finding that black borrowers are disproportionately affected by payday loans).

155. Daniel T. Lichter, Domenico Parisi & Michael C. Taquino, *Toward a New Macro-segregation? Decomposing Segregation Within and Between Metropolitan Cities and Suburbs*, 80 AM. SOC. REV. 843 (2015) (discussing changing patterns of segregation).

156. OLIVER & SHAPIRO, *supra* note 16, at 214.

157. Ards & Myers, *supra* note 117, at 234.

158. See, e.g., FED REPORT, *supra* note 39, at 54, 81; Ards & Myers, *supra* note 117, at 235–36; Rice & Swesnik, *supra* note 120, at 954–57; Spader, *supra* note 120, at 62.

more, she is more likely to need and have trouble paying off debt—making the cycle move more quickly and viciously.

On the whole, the fact that many borrowers go into debt because they are in an economically precarious situation can make those borrowers fulfill all the conditions needed to get the vicious cycle going and to keep it revolving. And even when credit scores are accurate measures of the riskiness of borrowers and are used only in non-discriminatory ways, they can play a role in creating and deepening already deeply disparate outcomes for black and white borrowers.

VI.

THE CRUEL IRONIES OF CREDIT REPORTING OUTSIDE LENDING CONTEXTS

The story does not end with lending. The Fair Credit Reporting Act allows for the use of credit reports in quite a broad range of areas outside the realm of consumer lending.¹⁵⁹ Through the widespread use of credit reports, a bad credit history has become a barrier to access to everything from a cell phone to an apartment to acceptance to the bar. Credit reports have become debt rap sheets, ensuring that one's borrowing behavior remains relevant long after it has been worked out with the lender or even ostensibly wiped clean in bankruptcy.¹⁶⁰

From an equal access to credit perspective, there is an irony to these developments. Creditworthiness was once based on a vague notion of general trustworthiness—now a broad concept of trustworthiness is based on a narrow measure of creditworthiness. One's propensity to pay off loans may be a good indicator of one's propensity to pay a monthly phone or rent bill—even if restricting access to apartments, phones, or insurance based on credit history raises its own questions—but the same cannot be said about one's propensity to be a good employee without invoking some ill-defined set of characteristics that debt payment and employee reliability share. In either case, though, if a person's credit history is largely attributable to the systemic inequalities discussed above, then making the rest of their life harder to live due to bad credit history is to penalize that person due to misfortunes foisted upon them.

Perhaps a deeper problem with the use of credit reports outside of credit markets is that it can lead to what I call the second vicious cycle. A low paying job coupled with a high cost of living has already been discussed as one of the major causes of indebtedness and default.¹⁶¹ If one's history of indebtedness and default has a part to play in determining one's ability to get a higher paying job or lower one's cost of living, then it will raise the difficulty level of moving up the class ladder.

159. 15 U.S.C. § 1681b (2012).

160. On this point, see Deborah Thorne, *Personal Bankruptcy and the Credit Report: Conflicting Mechanisms of Social Mobility*, 11 J. POVERTY 23 (2007); Ethan Cohen-Cole, Burcu Duygan-Bump & Judit Montoriol-Garriga, *Forgive and Forget: Who Gets Credit After Bankruptcy and Why?* (Fed. Reserve Bank of Bos., Working Paper No. QAU09-2, 2009).

161. See *supra* note 124–42 and accompanying text.

It is helpful to divide in two the extra-lending contexts in which credit reports are used. In a “quasi-lending context,” the relationship between the quasi-lender and the quasi-borrower looks something like the relationship between a lender and a borrower. Such contexts include, for example, apartment rentals, utilities, and insurance. In these relationships the quasi-borrower pays the quasi-lender, and the quasi-lender wants to know how reliable a payer the quasi-borrower is. But, because quasi-lenders provide services other than advances of money (even if payments for the services are deferred), it does not make sense to classify a quasi-lending relationship as a creditor-debtor relationship. Some quasi-lenders, such as insurers and utilities companies, use specialized credit scores with algorithms modified to predict the relevant behavior.¹⁶² Others, such as landlords and cell phone companies, simply pull a regular credit score and hope that it has some bearing on their behavior prediction.¹⁶³

In a “non-lending context,” the user of the credit report does not look like a lender and the subject does not look like a borrower. There is still usually a power imbalance between a non-lender and a non-borrower and a non-lender ostensibly uses a credit report to predict the behavior of a non-borrower, but the behavior is not payment behavior. Examples of non-lenders include employers and licensing boards. They tend not to use credit scores—in their place, they engage in subjective evaluation of credit reports.¹⁶⁴

Below I focus on the best-studied example of each context. My example of quasi-lending is insurance scoring. My example of non-lending is employment. I discuss the workings of each before examining the second vicious cycle.

A. Quasi-Lending: Insurance Scores

Starting in the 1980s, insurance companies began using traditional credit scores to help price the riskiness of an applicant. Currently they use FICO's bespoke scoring method called “insurance scoring” designed to predict the likelihood of having to pay out a claim for a given applicant.¹⁶⁵ At least in the automobile insurance industry—where purchasing insurance is mandatory in

162. See FED. TRADE COMM'N, CREDIT-BASED INSURANCE SCORES: IMPACTS ON CONSUMERS OF AUTOMOBILE INSURANCE 9–13 (2007) [hereinafter CREDIT-BASED INSURANCE SCORES] (on insurance scores); FREMSTAD & TRAUB, *supra* note 12, at 20 (on utility scores).

163. See *Credit Check for Landlords*, EXPERIAN, <https://connect.experian.com/credit-check/landlords.html> (last visited Jan. 12, 2016) (stating that the score is a VantageScore, which is the regular credit score type of the Big Three).

164. See *Equal Employment for All Act: Hearing on H.R. 3149 Before the H. Comm. on Fin. Insts. & Consumer Credit*, 111th Cong. (2010) (statement of Chi Chi Wu, National Consumer Law Center); Barbara Kiviat, *The Art of Deciding With Data: Evidence from How Employers Translate Credit Reports into Hiring Decisions* (2016) (working paper, July 17, 2015) (on file with author). However, I have heard anecdotal reports of employers using credit scores.

165. See CREDIT-BASED INSURANCE SCORES, *supra* note 162, at 9–13.

almost every state¹⁶⁶—these scores are most always used for pricing plans for new customers and are often used to re-price when customers renew their plans.¹⁶⁷ All states but Pennsylvania and Vermont regulate the practice, and it has been effectively banned in California, Massachusetts, and Hawaii.¹⁶⁸

Researchers have repeatedly found insurance scores to be predictive of the costliness of an individual to an insurance company.¹⁶⁹ The FTC's research further finds that "customers with lower scores filed substantially more claims than those with higher scores" even though "the average size of the claims paid was nearly constant regardless of credit-based insurance score."¹⁷⁰ No consensus has been reached on what accounts for the ability of information about an individual's credit history to predict her likelihood to file an insurance claim (but not the size of the claim). As a leading consumer advocate has pointed out, "even the industry admits they do not understand."¹⁷¹

The FTC has proposed a number of possibilities in the case of automobile insurance scores: that individuals with lower credit scores have a higher appetite for risk, that the financial distress distracts them, that they drive more miles, that they have less money so they cannot maintain their cars as well.¹⁷² None of these have been borne out by evidence. Chi Chi Wu of the National Consumer Law Center proposes a more feasible explanation, along with some empirical evidence: "[c]onsumers with lower incomes and lower scores simply may have fewer financial resources, and thus be more likely to file a claim rather than 'eating' the loss."¹⁷³ This explanation is closer shorn by Ockham's razor and better explains the pattern of filing more claims but not for any more money. Economically precarious drivers who do not get into any more or worse accidents, but are just more likely to file a claim when they do, are likely to make more frequent claims which are of the same size as drivers on firmer financial footing.

166. See Bobbie Sage, *Car Insurance Requirements: State-by-State Minimum Requirements*, ABOUT.COM, <http://personalinsure.about.com/cs/vehicleratings/a/blautominimum.htm> (last visited Jun. 8, 2014) (noting that not all states, but almost all, require automobile insurance).

167. CREDIT-BASED INSURANCE SCORES, *supra* note 162, at 16. Ninety-two percent of auto insurers used credit scores in the early 2000s. FREMSTAD & TRAUB, *supra* note 12, at 16. Other insurance companies use credit scores. *E.g.*, *id.* at 4 (noting that homeowners' insurance uses credit scores).

168. CREDIT-BASED INSURANCE SCORES, *supra* note 162, at 19. California and Massachusetts have only banned the practice in the case of auto insurance, while Hawaii has also banned it for homeowners' insurance. FREMSTAD & TRAUB, *supra* note 162, at 17.

169. CREDIT-BASED INSURANCE SCORES, *supra* note 162, at 20 (summarizing this research).

170. *Id.* at 26–27.

171. CHI CHI WU, NAT'L CONSUMER LAW CTR., CREDIT SCORING AND INSURANCE: COSTING CONSUMERS BILLIONS AND PERPETUATING THE ECONOMIC RACIAL DIVIDE 4 (2007) [hereinafter WU, CREDIT SCORING AND INSURANCE].

172. CREDIT-BASED INSURANCE SCORES, *supra* note 162, at 31–34. The FTC's research on insurance scores has been criticized by consumer advocates and even by one of the commissioners who participated in the study. FREMSTAD & TRAUB, *supra* note 12, at 17.

173. Wu, CREDIT SCORING AND INSURANCE, *supra* note 171, at 23.

If Wu's explanation is the correct one, then pricing insurance based on insurance scores looks an awful lot like imposing a poverty fee. Insurers already take into account a number of facts about applicants to predict the likelihood that they will have to pay out a claim, so it is difficult to see what credit-based insurance scores could add apart from the economic precariousness of the applicant. Although insuring the poor may indeed present a small risk,¹⁷⁴ charging more for a person on a less stable economic footing presents normative concerns of at least two types. First, it discriminates on the basis of socioeconomic class for products that are often required to remain a gainfully employed and otherwise fully participating member of society (which, although not illegal, raises several moral hackles).¹⁷⁵ Second, it makes the precarious applicant all the more precarious (and thus likely to file a claim) by draining their resources.

Even if Wu's explanation does not bear out, her point that pricing insurance plans on the basis of credit history "runs counter to the fundamental concept of spreading the risk of loss" does.¹⁷⁶ Moreover, offloading risk onto borrowers because they have a bad credit history without knowing why that should make them riskier (even if it is correlated with a higher likelihood of filing a claim) may facilitate more efficient pricing by reducing the effects of adverse selection,¹⁷⁷ but it definitely presents distributional problems; moreover, it does not necessarily (or efficiently) deter risky behavior.

Not all of this reasoning applies to other quasi-lending contexts. For instance, not all of these contexts purport to pool risk, and many use credit scores that have not been tested for applicability in their market. Still, at least one clear generalization comes from the insurance scoring case. Even if a credit-history-based score predicts a certain behavior, that does not mean that there are no normative difficulties with using that score. Distributional consequences are real and may, in certain circumstances, overwhelm any of the benefits of pricing for risk.

B. Non-Lending: Employment Credit Checks

Although "job-related credit checks are rare or illegal in most of the world,"¹⁷⁸ they are explicitly permitted in the United States under the Fair Credit

174. And it is small, since the amount of claims are very low across all groups. See CREDIT-BASED INSURANCE SCORES, *supra* note 162, at 27.

175. An automobile is required for many jobs, and auto insurance is required for anybody having an automobile. Other types of insurance may be more or less essential, depending on one's situation.

176. Wu, CREDIT SCORING AND INSURANCE, *supra* note 171, at 5.

177. Adverse selection is less of a worry, of course, in a market in which all must participate and in which prices are regulated.

178. Kristine M. Kuhn & Marsha L. Nielsen, *Understanding Applicant Reactions to Credit Checks: Uncertainty, Information Effects and Individual Differences*, 16 INT'L J. SELECTION & ASSESSMENT 307, 307 (2008).

Reporting Act.¹⁷⁹ No states have banned the practice, but ten states (and New York City) have restricted their use,¹⁸⁰ with twenty more considering doing so.¹⁸¹ U.S. Senator Elizabeth Warren has twice introduced a bill that would enact such restrictions at the federal level.¹⁸²

Having begun in the 1960s,¹⁸³ the use of credit reports in hiring decisions has grown rapidly in recent years: “[i]n 1996, 19% of respondents reported using credit checks in the selection of employees; in 2003, this number increased to 35%...[in 2006, to] 43%.”¹⁸⁴ A recent survey of employers indicates that the number is closer to sixty percent today,¹⁸⁵ and that number may be higher for employers with lower income employees.¹⁸⁶ Due apparently to a concern about the possibility of being hit with an employment discrimination lawsuit,¹⁸⁷ CRAs generally provide a credit report but not a credit score to employers,¹⁸⁸ although I have personally heard anecdotal reports that some employers do use scores.

Employers seem to view credit histories as a sort of background check. But employers are not creditors, so it is not initially clear for what exactly they think credit reports serve as a proxy.¹⁸⁹ Researchers who have studied the phenomenon have offered a few possibilities. Perhaps a low credit score could indicate that an individual has a higher probability of “deviant” activity or represents a generalized risk. CRAs, after all, still often advertise their wares as evidence of the “character” of borrowers.¹⁹⁰ From a less moralistic perspective, research on personality has provided some evidence that some traits correlate with financial

179. 15 U.S.C. § 1681b(b) (2012).

180. *Use of Credit Information in Employment 2013 Legislation*, NAT’L CONF. ST. LEGISLATORS, <http://www.ncsl.org/research/financial-services-and-commerce/use-of-credit-info-in-employ-2013-legis.aspx> (last visited Jul. 12, 2014). The states are California, CAL. LAB. CODE § 1024.5 (West 2015); Colorado, COLO. REV. STAT. § 8-2-126 (2015); Connecticut, CONN. GEN. STAT. § 31-51tt (2015); Hawaii, HAW. REV. STAT. §§ 378-2.7 to -2.8 (2015); Illinois, 820 ILL. COMP. STAT. §§ 70/1–/30 (2015); Maryland, MD. CODE ANN., LAB. & EMPL. § 3-711 (West 2015); Nevada, NEV. REV. STAT. § 613.160–190 (2015); Oregon, OR. REV. STAT. § 659A (2015); Vermont, VT. STAT. ANN. tit. 21, § 495i (2015); and Washington, WASH. REV. CODE § 19.182.020 (2015). New York City’s law is N.Y.C., N.Y., ADMIN. CODE § 8-107 (2015).

181. FREMSTAD & TRAUB, *supra* note 12, at 19. This text was published before Colorado and Nevada enacted their statutes.

182. Equal Employment for All Act, S. 1837, 113th Cong. (2013); S. 1981, 114th Cong. (2015).

183. HYMAN, *supra* note 1, at 209.

184. Laura Koppes Bryan & Jerry K. Palmer, *Do Job Applicant Credit Histories Predict Performance Appraisal Ratings or Termination Decisions?*, 15 PSYCHOL.-MANAGER J. 106, 109 (2012).

185. FREMSTAD & TRAUB, *supra* note 12, at 17.

186. *See* TRAUB, *supra* note 134, at 3.

187. I do not, of course, know the mind of employers, but this is not an unreasonable conclusion given the recent administrative action on the subject. *See* Dep’t of Labor v. Bank of Am., 1997 O.F.C. 16 (2010).

188. *See, e.g.*, TRAUB, *supra* note 134, at 2; Kiviat, *supra* note 164.

189. Setting aside the above suggestion that employers use credit checks as a proxy for criminal record in the case where the applicant has incurred criminal justice fees. *See supra* Part II.

190. *Cf.* Bernerth, Taylor, Walker & Whitman, *supra* note 140, at 470.

responsibility; assuming the validity of this research and leaping to a conclusion about direction of causation, evidence of past financial irresponsibility could serve as a proxy for such risk-creating personality traits. Most important of these traits to employers are emotional stability (especially impulse control) and conscientiousness.¹⁹¹ One other possibility is that credit history may be an indication of financial distress, which could lead to “counterproductive work behaviors such as fraud, theft, or sabotage.”¹⁹²

Amidst a mound of research finding no relationship between measures of credit history and measures of job performance, only one study indicates even a weak correlation.¹⁹³ That study is flawed in a variety of ways, and until its results are replicated with an improved research design, there is little to no empirically grounded reason to think that credit scores have any relationship to job performance. Moreover, even if credit scores were related to job performance, employers do not generally see credit scores when they evaluate potential employees—they (usually) engage in a subjective evaluation of credit reports.¹⁹⁴ If, as many scholars of credit reporting have argued,¹⁹⁵ judgmental underwriting is unreliable in lending contexts where the evaluators are usually trained experts, it is hard to see how it could be reliable in a non-lending context where the evaluators have no experience. Employment credit checks look a lot

191. *Id.* at 471. See also Bryan & Palmer, *supra* note 184, at 107 (“[E]mployers and researchers have given considerable attention to measuring integrity or honesty of prospective employees for predicting performance, counterproductive work behaviors (CWBs), or turnover. Similarly, an interest in conscientiousness . . . has emerged as a predictor of job performance.” (citations omitted)).

192. Bryan & Palmer, *supra* note 184, at 110.

193. See Kelly Gallagher, *Rethinking the Fair Credit Reporting Act: When Requesting Credit Reports for “Employment Purposes” Goes Too Far*, 91 IOWA L. REV. 1593, 1593 (2006) (noting that she could not find any such empirical support after canvassing the literature); Kristine M. Kuhn & Marsha L. Nielsen, *Understanding Applicant Reactions to Credit Checks: Uncertainty, Information Effects and Individual Differences*, 16 INT’L J. SELECTION & ASSESSMENT 307, 308 (2008) (“To our knowledge, there are no published studies on the validity of credit checks for hiring employees.”); Lea Shepard, *Toward a Stronger Financial History Antidiscrimination Norm*, 53 B.C. L. REV. 1695, 1715–16 (2012) (noting that there was only one study providing such empirical evidence as of 2012); Andrew Weaver, *Is Credit Status a Good Signal of Productivity?*, 68 ILR REV. 742 (2015) (finding credit history unrelated to worker productivity). To elaborate on the study that found a correlation: it found that low credit scores correlated (at $p \leq .05$ level) with low conscientiousness, high agreeableness, worse task performance, and worse “organizational citizenship behavior.” Bernerth, Taylor, Walker & Whitman, *supra* note 140, at 472–73. It further found that credit scores were not related to deviant behaviors or to any other personality trait and that personality traits accounted for less than fifteen percent of the variance in credit scores. *Id.* at 473–75. Aside from the weak effects sizes (a point buttressed by the fact that the authors themselves acknowledge that credit scores are very noisy indicators of personality traits), the study has a number of flaws worth noting. Among them: sampling was far from representative, drawing mostly from university students and especially heavily from business students, Shepard, *supra* note 193, at 1716 (acknowledging this flaw); it included no unemployed people; and it relied on subjective measures of job performance from the employees’ supervisors without testing for the reliability of these measures, Bernerth, Taylor, Walker & Whitman, *supra* note 140, at 472.

194. See Shepard, *supra* note 193, at 1716.

195. See *supra* Part II.A.

like the supposedly outdated practice of conflating credit history with a nebulous and bias-ridden notion of moral fiber.

Indeed, recent work by sociologist Barbara Kiviat has found that hiring professionals create narratives for what a credit report tells them about an employee based on intuitive and inconsistent notions.¹⁹⁶ The professionals Kiviat interviewed, unequipped with clear notions of what a credit report could tell them about an employee, consistently resorted to taking the sterile information on the reports and creating narratives of how a job candidate's behavior might have led to those results.¹⁹⁷ Presented with the same information, different employers at times drew opposite conclusions—with one telling a justificatory narrative and one condemning, with neither basing conclusions on any real information about the candidate except for an unpaid debt.¹⁹⁸ Some employers, even when they knew an item was in error, would not hire an employee until it was fixed.¹⁹⁹ Many employers required job candidates to justify their credit reports, requiring candidates to come up with their own narrative for why an employer might care about their credit, in order to respond to it.²⁰⁰

Employer behavior indicates that not even they know what they are looking for in credit reports, but they have to invent something.

C. *The Second Vicious Cycle*

Insurance scores reveal some aspect of insurance applicants that predict a higher rate of claims, although it is unclear which. It is unclear whether employment credit checks reveal any aspect of job applicants that predicts job performance. But we do know something about what credit scores might show. We have already seen that economic precariousness, much of which can be attributed to structural conditions, can lead to bad credit and that a history of racism combined with the continued presence of racism outside of the context of credit-score-based lending can do the same.²⁰¹ We have further seen that falling victim to predatory loans can lead to bad credit.²⁰² And, of course, a vicious cycle of low credit scores and high interest rates can lead to even worse credit without any discriminatory or predatory behavior by the lender.²⁰³

If bad credit history means (among other things) expensive insurance and an unforgiving labor market, and a bad credit report reflects a borrower's economic precariousness, race, history with predatory loans, experience with a vicious

196. Kiviat, *supra* note 164.

197. *Id.* at 11–13.

198. *Id.* at 12 (“Depending on the hiring professional, a late payment could mean either a frivolous spending spree or a principled stand against paying for a faulty product.”).

199. *Id.* at 17.

200. *Id.* at 13–15.

201. *See supra* Part IV.

202. *See supra* Part IV.C.

203. *See supra* Part III.A.

cycle, or any combination of these things, then borrowers vulnerable because of any of these factors will have to pay more for insurance and work harder to find a job.²⁰⁴ Given the fact that there is only the weakest evidence that bad credit tells non-lenders anything relevant to their decisions, non-lenders who use credit reports in their decision-making process are (whether intentionally or not) likely to discriminate based on class or race.²⁰⁵

Several authors have advocated banning or severely limiting credit checks in employment,²⁰⁶ providing support for the bills that have been introduced around the country and at the federal level.²⁰⁷ In quasi-lending contexts the analysis is a bit more complicated. Descriptively, it will be difficult to separate out which aspects of a borrower correlate (let alone cause) the relevant outcome. Normatively, it is difficult to balance the usefulness of the information with possibility that it reflects a fact about an unequal system rather than an opportunistic individual. Still, one cannot avoid the fact that bad credit is strongly associated with an unfair distributional system, so increasing expenses for those with low credit scores is likely to be increasing expenses for the otherwise disenfranchised.²⁰⁸

The second vicious cycle kicks in because the cost of insurance, for instance, and the accessibility of gainful employment affect one's need for debt and one's ability to pay for it.²⁰⁹ The mechanisms here are straightforward: the more one needs to pay for insurance, the less one has to pay back debts; the less opportunity one has to make money, the less money one has to pay back debts. Similarly, the more one needs to pay for insurance, the less one has to pay for other goods and services, and the more likely one is to borrow to pay for those goods and services; the less opportunity one has to make money, the less one has to pay for goods and services, and the more likely one is to borrow to pay for those goods and services.

204. See *supra* notes 124–200 and accompanying text.

205. Title VII of the Civil Rights Act would thus potentially be implicated here, as at least one court has found and is under consideration by others. *Office of Fed. Contract Compliance Programs v. Bank of Am.*, No. 1997-OFC-16, 2010 WL 9034675 (Ben. Rev. Bd. Jan. 21, 2010); see also FREMSTAD & TRAUB, *supra* note 12, at 19; Shepard, *supra* note 193, at 1732.

206. See, e.g., FREMSTAD & TRAUB, *supra* note 12, at 25; TRAUB, *supra* note 134, at 13.

207. See *supra* notes 180–82.

208. In the case of insurance, some authors have concluded that the analysis weighs in favor of banning the use of credit histories. E.g., *Equal Employment for All Act: Hearing on H.R. 3149 Before the H. Comm. on Fin. Insts. & Consumer Credit*, 111th Cong. (2010) (statement of Chi Chi Wu, National Consumer Law Center); FREMSTAD & TRAUB, *supra* note 12, at 26. The FTC concluded that insurance scores were a partial proxy for race and income. CREDIT-BASED INSURANCE SCORES, *supra* note 162, at 64–66. It was “unable to develop a credit-based insurance scoring model that met the dual objectives of maintaining predictive power and decreasing the differences in scores between racial, ethnic, and income groups.” *Id.* at 74.

209. A similar argument has been made by other authors, although not quite in the same way. Cf. TRAUB, *supra* note 134, at 9; Gallagher, *supra* note 193, at 1606–07; Shepard, *supra* note 193, at 1734–38.

These pressures, especially when taken cumulatively, are almost certain to have a bearing on credit scores and interest rates. As discussed above, economic instability as brought on by less stable income (including less stable employment) and more expensive goods and services (including higher insurance premiums) leads to lower credit scores. We have already seen how low credit scores lead to a vicious cycle within the lending market. Now we have seen how the second vicious cycle works: a low credit score leads to more employment instability and more expensive goods and services, which leads to a higher need for credit, which is more expensive because of the low credit score, which leads to a need for a better-paying job and/or more credit, which are harder and more expensive because of a lower credit score, which makes it less likely that the loans will be paid off, which will lower a credit score further, etc. Articulated more concisely: bad credit makes loans more expensive while making accumulating the means to pay off loans more difficult. Bad credit and economic precariousness are mutually reinforcing.

VII.

RETHINKING HOW ECONOMIC EQUALITY RELATES TO CREDIT REPORTING

Let us regroup to highlight the important points of the analysis so far. Even assuming that credit scores work as they are supposed to in credit markets that work as they are supposed to, credit scores are likely to play a role in creating a vicious cycle for borrowers with low scores. They do so by restricting the options of these borrowers to higher-interest loans, which, by being harder to pay, make low-score borrowers more likely to behave in a way that further lowers their scores. There is good reason to believe that many borrowers forced into this cycle are those who have been buffeted by structural inequities.²¹⁰ I hasten add that even if many opportunistic or negligent (but economically sound) borrowers are also caught in the cycle, they will not be harmed as much by it, since they will be better able to afford the interest rates and more likely to be able to change their behavior for the better. The expanding use of credit reports and scores outside of credit markets make this cycle worse, whoever feels its pull. Borrowers' past borrowing behavior will harm not only their future loan terms but also their ability to earn enough money to improve their situation.

A. General Considerations

For many borrowers, then, the ubiquity of credit reports means that their past experience with lending throws barriers to access in front of nearly every

210. It is artificial to completely distinguish "irresponsible" from "vulnerable" borrowers. As Jean Braucher points out, drawing from poverty research, structural inequalities often lead to behaviors in poor communities which look like irresponsibility. Jean Braucher, *Theories of Overindebtedness: Interaction of Structure and Culture* (Ariz. Legal Studies, Discussion Paper No. 06-04, 2006). Grappling with these facts would lead to a richer normative analysis, but I do not think they would alter the bottom-line conclusions.

form of economic improvement. The fact that these barriers are largely due to experience with past barriers (and yet are often talked about as evidences of character flaws) keeps the cycle spinning.

Although this reality undermines the story of equal access to credit through neutral underwriting, it would be simplistic to suggest that it implies that credit reporting or risk-based pricing is a per se noxious force. Rather, it suggests that equality in credit markets cannot be untied from equality outside of them. As has been emphasized again and again in many other contexts, ridding decision-makers in power of explicit bias does not thereby open up access to all.²¹¹ There are many ways for inequality to perpetuate itself perniciously, including implicit bias, the structural reverberations of past explicit bias (in terms of wealth accumulation, housing segregation and the like) without explicit remedial action to remove them, and the reproduction of privilege and power through nominally meritocratic processes than can be more easily gamed by elites.²¹² These factors have strong pulls on credit markets. Since around the 1970s, when wages began to stagnate even as productivity grew, consumer finance driven by high financiers has done much to fill in the gap.²¹³ For those who began that period with the least wealth and income, the result was all the worse. In an economy that supported less and less class mobility, debt became less an accelerator to the middle class and more a “structural imperative” that reinforced class stratification.²¹⁴

Although the massive structural changes of the past half century or so were foreseen by few, the likelihood that a neutral statistics-based mediator of access to credit would maintain an unequal credit system was easily foreseeable. Indeed, Bella Abzug, a leading feminist proponent of fair lending legislation, “believed that some discrimination against black borrowers might be justified statistically,” since their tendency to have lower incomes made them greater credit risks.²¹⁵ No matter how shorn of bias credit scoring becomes and no matter how ingenious financial instruments become, they cannot avoid reproducing inequality so long as the surrounding distributive mechanisms continue to produce it.

In order to truly address the deep problems that make the bite of the vicious cycle so painful for so many, more than minor adjustments in underwriting

211. See generally CHRIS HAYES, *TWILIGHT OF THE ELITES: AMERICA AFTER MERITOCRACY* (2012) (arguing that a formal meritocracy actually perpetuates privilege and narrows decision-makers perspectives); CHERYL STAATS, KIRWAN INST., *STATE OF THE SCIENCE: IMPLICIT BIAS REVIEW 2014* (2014) (summarizing the literature on how biased decisions occur subconsciously); William Darity, Jr., *Stratification Economics: The Role of Intergroup Inequality*, 29 J. ECON. & FIN. 144 (2005) (providing evidence that dominant groups can create lasting economic advantages for themselves even without continuing overtly discriminatory behavior).

212. See *supra* note 211.

213. See DUMÉNIL & LÉVY, *supra* note 124; HYMAN, *supra* note 1, at 283–92.

214. HYMAN, *supra* note 1, at 283.

215. *Id.* at 205.

methodology would need to be considered. “Fair lending” in the sense of non-biased lending may be a worthy goal in itself, but the fairness of a lending system cannot truly be considered independently of who tends to take out loans and to pay for what. Credit reporting has become for many a form of means testing for access to goods and services that are available as free (governmentally funded) public goods in many societies. People in economically precarious situations (which is most of the U.S.)²¹⁶ would have much less need for debt and a much easier time paying it off were there less of a gap between their means and their costs of living. It would cease the self-fulfilling prophecy early on and reduce consumers’ need to take out predatory loans. In other words, the inequality reproduced by credit scores is in an important sense just the inequality that would be better alleviated by more sweeping economic policy changes having nothing to do with underwriting or even with debtor-creditor law per se.

Although I would hope that a deeper reconsidering of the relative pros and cons of debt as a distributive mechanism could result from the arguments I have presented here, I realize that smaller bore policy ameliorations are more likely. Luckily, I think the foregoing analysis provides the basis for considering at least a few.

B. Policy Recommendations for Extra-Lending Contexts

First of all, making credit markets safer for consumers would cut through the tangled cycle of predatory lending and would make CRAs more responsible actors. How this should best be done is a topic best treated in a more spacious forum.²¹⁷ Dodd-Frank’s creation of the Consumer Financial Protection Bureau and its early regulatory and enforcement actions are heartening developments but can hardly be said to have eradicated the problem.²¹⁸

My most concrete and discreet proposal, foreshadowed in the preceding Part, is to study and, in some cases, ban the use of credit reporting outside lending contexts. In a country where bad credit is most often attributable to economic hardship, discriminating on the basis of credit status should at least raise regulatory eyebrows. How best to clamp down on extra-lending credit reporting will depend on the particular context in which it takes place. In some contexts, it will make sense to ban it outright and immediately. In others, a more

216. HACKER, *supra* note 129, at 7–9.

217. Cf. Oren Bar-Gill & Elizabeth Warren, *Making Credit Safer*, 157 U. PA. L. REV. 3 (2008).

218. See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010). The CFPB lists its regulations at *Regulations*, CONSUMER FIN. PROTECTION BUREAU, <http://www.consumerfinance.gov/regulations/#finalrules> (last visited Jun. 11, 2014). For some recent enforcement actions see, for example, *Consumer Financial Protection Bureau v. Cash Call, Inc.*, No. 1:13-cv-13167 (GAO) (D. Mass. Mar. 21, 2013), http://files.consumerfinance.gov/f/201403_cfpb_amended-complaint_cashcall.pdf; Consent Order, *Ally Financial Inc.*, No. 2013-CFPB-0010 (C.F.P.B. Dec. 20, 2013), http://files.consumerfinance.gov/f/201312_cfpb_consent-order_ally.pdf.

balanced approach that limits the use to which credit reports can be put will be more appropriate. In still others, much more study will be needed before initiating any action. A quick look at the examples of employment and insurance credit checks will illustrate some of the factors to take into consideration.

In the case of employment credit checks, almost every bit of evidence points to the conclusion that credit reports do not provide employers with any relevant information.²¹⁹ Theories purporting to explain how credit history reflects on employability through the intermediary of “character”—which even if true would look an awful lot like a private disciplinary apparatus²²⁰—seem to be bunk. But bad credit does reflect a past with economic hardship, in many cases attributable to structural racism. Thus, allowing credit checks in the employment context seems only to do harm. They should be banned.²²¹

In the case of insurance scoring, there is reliable evidence that a bad credit history reflects a higher likelihood of entering an insurance claim, although not for more money.²²² However, why credit and claims correlate in this way is unclear. The best available explanation is that people with worse credit are less likely to have savings as a safety net, and thus will be more likely to need insurance in the case of an accident.²²³ As I said above,²²⁴ this makes charging higher premiums for people with lower credit look like discriminating on the basis of economic precariousness. More study would be necessary to determine exactly what is going on here, but banning insurance scores, as California, Massachusetts, and Hawaii have done in some markets,²²⁵ should certainly not be ruled out.

More generally, the place of non-credit-market credit reporting in a larger vicious cycle that perpetuates poverty deserves closer regulatory scrutiny.²²⁶ While acknowledging the (lack of) feasibility of what I am about to say given present political realities, the presumption should be that quasi-lender and non-lender use of credit reports harms consumers and can only be justified by the

219. *See supra* Part VI.C.

220. *Cf.* LAZZARATO, *supra* note 131.

221. Lea Shepard suggests that banning employment credit checks will be ineffective since applicants with good credit will still have an incentive to voluntarily disclose, making applicants who refuse to disclose less desirable. Lea Shepard, *Seeking Solutions to Financial History Discrimination*, 46 CONN. L. REV. 993, 1014–16 (2014). The alternative she suggests is having employers use statistically validated credit scores rather than subjective credit reports. *Id.* at 1035–43. This is unsatisfactory for at least three reasons: (1) there is *de minimis* evidence that employment scores would predict anything useful, (2) there is no reason to think they would be any easier to enforce than a ban, and (3) given my arguments here, it is actually unclear that they would be more normatively desirable.

222. *See supra* note 147 and accompanying text.

223. *See supra* note 149 and accompanying text.

224. *See supra* note 151 and accompanying text.

225. *See supra* note 144.

226. In fact because many current extra-lending uses of credit reports are explicitly provided for by the FCRA, 15 U.S.C. § 1691b (2012), congressional, and not just regulatory, action would be required.

demonstration of a legitimate business purpose and even then only if not infringing on another right (such as the right to equal protection) nor harming more than it helps consumers. If starting from scratch, for instance, I would recommend disallowing insurance scoring pending a more thorough analysis of how it works and whether it reflects a consumer-friendly insurance market.

C. Policy Recommendations for Credit Markets

I have not taken into account sufficient factors about how credit scoring works within credit markets to create the space for a comprehensive argument about how CRAs should be regulated (and whether they should be nationalized).²²⁷ However, two tractable questions are how loan risk should be taken into account in credit scores and how to make risk-based pricing less penalizing. All the below analysis continues to assume away accuracy and other problems with credit scores.

Currently, the terms of loans have no place in credit scoring algorithms whatsoever.²²⁸ Including them may allow lenders to more effectively distinguish between risky borrowers and reliable borrowers who have a past with risky loans. This possibility is especially important in the case of predatory loans. When a borrower has been duped—whether through fraud or through manipulation of their cognitive biases—into taking out a loan that will be exceedingly difficult to repay, it is adding insult to injury to let that fact turn their credit bad. If bad credit restricts their future lending options to those of the predatory persuasion, it adds injury to injury. I have already set aside the policy solutions of wealth equalization and safe credit markets as goals worthy of discussion elsewhere. With regards to more narrow measures, mitigating the damage that default on a predatory loan does to a credit score may be possible.²²⁹

From one perspective, predatory loans are just an extreme form of high-interest loans. Both add to the risk of default by making repayment more difficult. Thus, it is nearly as desirable to differentiate out the risk presented by risky loans—whether or not they are predatory—from the risk presented by a

227. As they are in France. JENTZSCH, *supra* note 97, at 102.

228. Anonymous former employee of the credit reporting industry.

229. The first difficulty with this prospect is coming up with a clear boundary line between predatory and non-predatory loans, or defining the degree to which a loan is predatory. Assuming it would be possible in an operationalizable way, one would still face the complications of ascertaining the rate at which to discount a borrower's adverse behavior. If the loan's burden hadn't been backloaded, would the borrower's repayment record have been flawless? If the borrower had understood the implications of the terms of the loan up front would they have simply not taken it out? Or would the borrower have taken out the loan and behaved adversely anyway, but in a less extreme manner? Of course these subjunctive questions are unanswerable for any particular borrower, but they do seem answerable for the average borrower (and maybe even the average borrower with similar characteristics). Many lenders very likely already have some of the necessary information, since the profit in predatory lending depends on predicting borrower behavior given a particular loan structure. It is at least possible in theory to base a feasible credit scoring discount schedule for predatory loans on this information.

given borrower. Many of the same practical difficulties present themselves as in the case of predatory loans, but viewing high-interest loans and predatory loans as on a continuum alleviates one difficulty. Rather than attempting to differentiate in a principled way between predatory and non-predatory loans, the model builder need only have some measure of how much variance in the rate of default a given loan term or set of loan terms contributes.

Asking the question of how to make risk-based pricing less penalizing brings up the thorny and thoroughly debated possibility of interest rate caps. Limiting the amount of interest lenders can charge limits the amount of damage a loan can do (which is both good in itself and instrumentally good insofar as it slows the vicious cycle) while also creating a clear endpoint for the vicious cycle. However, capping interest rates can also push lenders to refuse to lend to risky borrowers, which, in turn can push risky borrowers into black market credit (where interest rates tend to be much higher, at times priced in the currency of bodily injury) or into taking out no loan at all when a loan is needed. Lenders who do not restrict risky loans will have to make up for the losses incurred from risky borrowers by raising interest rates for less risky borrowers, which will push those borrowers towards other lenders, triggering an adverse selection problem. On the other hand, insofar as high interest rates themselves increase the probability of default, lowering interest rates for risky borrowers will, up to a point, actually increase the profitability of lending to borrowers with bad credit. This effect will be all the more resonant for predatory loans, since a well-made interest rate cap restricts the amount of costs that can be hidden, both increasing the transparency of the loan price and making it less risky.²³⁰

In theory, the market itself will best calibrate the proper balance between pricing for risk and risky prices, especially if that market is not tainted by behavioral (or any other) market failure. In this picture, once a regulator has done all it can to correct for the cognitive biases of consumers (whether through disclosure, soft price caps, or well-calibrated hard caps), it should let the market do the rest of the work. Yet, even with rational choice assumptions, if there are multiple equilibria, further regulatory action may be warranted. Suppose, for ease of exposition, that there are two possible equilibria. In the first, lenders have a broad range of interest rates, in which, on the subprime end, the riskiness of both borrowers and loans are made up for by the very high prices the few of the non-defaulting risky borrowers actually pay. In the second, lenders have a narrower range of interest rates with correspondingly fewer defaults and a bit more cross-subsidization of risky borrowers by safe borrowers. A priori, it seems that only providence will decide which equilibrium will be reached. But a

230. Of course, if a business model is built on pushing borrowers into revolving rather than repaying (as many predatory business models are), then restricting lenders' ability to do so will decrease profitability while increasing probability of repayment. I have no problem with this. Also to be kept in mind is that creating price caps for multi-price products (as many predatory loans are) is a tricky business that requires careful calibration so as to avoid unintended consequences. See Oren Bar-Gill, *Price Caps in Multiprice Markets*, 44 J. LEGAL STUD. (forthcoming).

regulator, by capping interest rates, setting a floor on interest rates, or setting a permissible range of interest rates, could push the market towards the latter, which would be just as efficient but less harmful to less well-off borrowers.

VIII. CONCLUSION

I offer the preceding policy recommendations with varying levels of enthusiasm. Banning credit checks in non-lending contexts and curtailing or banning them in quasi-lending contexts seem like good ideas, all things considered. Tweaking credit scoring methodology might have some impact, but possibly at too great a cost. The merits of regulating interest rates is a topic too big to fit within one subpart of this article. And the question of how income and wealth should be better distributed is, of course, beyond the confines of a single article, let alone a subpart of one.

But more importantly than any of the particular policies—the details of which are best worked out elsewhere—what I hope I have shown here is that the inquiry into the role of credit reporting in society cannot simply end with whether it is accurate or not. With consumer lending filling in more and more of the gap between production and consumption, the issue of equal access to credit cannot be cordoned off from discussions about stratified labor markets, segregated cities, collapsing social safety nets, and the regulation of consumer credit markets. Equal access to credit is at best only a small counter-eddy compared with the massive currents of inequality buffeting borrowing behavior. Credit scores must be understood in that light. They have become a form of means testing for a broad array of goods and services. Like all forms of means testing, they must be subject to careful and extended normative scrutiny in light of the distributive systems they support. We should be both more circumspect about where we allow credit reporting to be used and more skeptical about the notion that a well-regulated credit market can substitute for a well-designed redistributive program.