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Not-So-Smartphone Disclosures

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INTRODUCTION

Imagine two credit card issuers. One prices its products competitively and charges just enough interest and fees to cover costs and make a reasonable profit. Call that one CompCard. The other, PredCard, provides the exact same service but charges higher interest and fees. In a world of perfect competition, consumers would recognize that CompCard offers better terms and apply for its card. PredCard would have to compete by lowering its prices, offering some benefits CompCard does not, or else go out of business. The market—really consumers themselves—would protect consumers from predatory lenders or even those who merely charged supra-competitive prices. But if consumers cannot determine which credit card offers better terms, some will opt for PredCard even though they would be better off with CompCard.[1] Some consumers will thus be left unprotected.

Unfortunately, the consumer credit market, and particularly the credit card market, lacks perfect competition.[2] To take only

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1. The cost of different credit cards to consumers can vary considerably. In one recent year—2018—consumers with deep prime credit cards were charged substantially higher interest rates than super-prime borrowers. *See* Alexandria White, *Deep Subprime Borrowers Incur $1,599 More Interest on the Average Credit Card Balance Than Super-Prime Borrowers*, CNBC SELECT (Mar. 20, 2023), [https://perma.cc/NZK6-QCG7]. Subprime credit cards also typically charge a multitude of fees. *See* Andrea Woroch, *10 Common Subprime Credit Card Fees*, BADCREDIT.ORG (Aug. 11, 2022), [https://perma.cc/J4GX-342X].

2. *See* OREN BAR-GILL, SEDUCTION BY CONTRACT: LAW, ECONOMICS, AND PSYCHOLOGY IN CONSUMER MARKETS 65 (2012) ("[T]he profitability of credit card issuers

one example, for decades, one impediment to perfect competition was that different lenders used different interest rate calculation methods, meaning their loan terms could not readily be compared to each other.[3] Consequently, consumers contemplating borrowing could not determine which loan offered the best terms.[4]

Lawmakers have responded to consumer credit market failures in three principal ways. First, historically, they used usury laws to cap interest rates.[5] That limited the ability of predatory lenders to take advantage of consumers.[6] But usury laws, however important they may be, face important limits. One is that even when they apply, they do not protect consumers against taking out high-priced loans that are nevertheless below the usury thresholds.[7] Second, and perhaps more important in today's world, usury laws are largely inapplicable to some consumer lending markets, including credit cards.[8]

A second method lawmakers employ to bring markets closer to perfect competition is disclosure. And so, Congress enacted the Truth in Lending Act ("TILA"), which obliges lenders to disclose loan terms in standardized forms.[9] In theory, a borrower could put CompCard's disclosure form next to PredCard's and determine which offered the best terms. But when it came to some credit card terms, such as penalty fees—late fees and the like—Congress concluded that TILA's disclosures were not enough to protect consumers.[10] Consequently, Congress added a

consistently exceeds the average profitability in the banking industry, leading some commentators to conclude that competition in the credit card market is imperfect.").

3. *See* NAT'L COMM'N ON CONSUMER FIN., CONSUMER CREDIT IN THE UNITED STATES 169-70 (1972).

4. *See id.* at 170.

5. Among the oldest extant usury prohibitions are those included in the Bible, Koran, and Manusmriti. *See, e.g.*, *Exodus* 22:25; THE KORAN 2:275 (Maulawi Sher Ali trans., Islam Int'l Publ'ns Ltd., 2021); THE LAWS OF MANU 8:152 (G. Bühler trans., Oxford, 1886). The original thirteen colonies had usury laws, and every state in the United States had usury laws in one form or another well into the twentieth century. *See* Paul E. Kantwill & Christopher L. Peterson, *American Usury Law and the Military Lending Act*, 31 LOY. CONSUMER L. REV. 500, 504-05 (2019).

6. *See* Kantwill & Peterson, *supra* note 5, at 505.

7. *See id.* at 505-06.

8. *See infra* notes 104-11 and accompanying text.

9. *See* Truth in Lending Act, 15 U.S.C. §§ 1601-1667f (2021).

10. *See* 15 U.S.C. § 1601; *see infra* note 11 and accompanying text.

third approach: it amended TILA by enacting the Credit Card Accountability Responsibility and Disclosure Act of 2009 ("Credit CARD Act") to, among other things, limit the penalty fees charged by credit card issuers.[11]

Though usury laws and regulation of charges are germane to our findings, this Article focuses largely on disclosure. Specifically, we examine whether consumers understand the disclosures mandated for credit cards in the medium in which many consumers now engage in financial transactions. The answer is important because predatory lenders and others who charge supra-competitive rates can still take advantage of consumers by making excessively-priced loans if consumers cannot understand TILA's disclosures in the form in which they see them.[12] And while our study is limited to credit card disclosures, its chief findings may apply as well to other consumer credit disclosures.

All this brings us to a twenty-first-century consumer financial services innovation: fintech.[13] Fintech is a portmanteau created from the words "financial technology," and in its broadest sense means using technology to assist in financial transactions.[14] One form fintech takes is allowing consumers to engage in financial transactions on smartphones.[15] Not only can debt collectors demand payment by text,[16] but consumers can use their smartphones to obtain loans (including credit cards),[17] pay

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

12. *See Weighing the Risks of Online Loans*, OAK TREE L., [https://perma.cc/S99W-9J3N] (last visited Sept. 18, 2023) ("By far the biggest risk of an online loan is the high interest rate that they come with. . . . In addition to the high interest, online loans, especially online payday loans, often come with high upfront fees.").

13. *See 21st Century FinTech*, LIBR. OF CONG. (Jan. 6, 2021), [https://perma.cc/MAD5-2NX6].

14. *See* Julia Kagan, *Financial Technology (Fintech): Its Uses and Impact on Our Lives*, INVESTOPEDIA (Apr. 27, 2023), [https://perma.cc/3WQF-KMN7].

15. *See How Smartphones Have Transformed Access to Financial Service*, ESADE (July 23, 2021), [https://perma.cc/VC6G-YL32].

16. *See* 12 C.F.R. 1006.6(d)(3) (2021).

17. *See* CONSUMER FIN. PROT. BUREAU, THE CONSUMER CREDIT CARD MARKET 62, 66 (2021) [hereinafter CFPB, 2021 CREDIT CARD MARKET], [https://perma.cc/X2QF-CJ2R] (asserting that consumers can submit credit card applications through a mobile app and that more than half the general purpose credit card applications submitted in 2020 were submitted either via phone or tablet); Kat Tretina, *Mobile Loans: How to Apply for a Loan Using Your Smartphone*, CREDIT KARMA [https://perma.cc/25V3-XSYB], (last visited Sept. 18, 2023)

creditors,[18] deposit checks,[19] and make purchases.[20] At least one credit card was originally available *only* through smartphones.[21] The industry has been quick to embrace this technology: according to one report, more than half of all financial institutions have an app specifically designed to enable consumers to apply for a loan on a mobile phone.[22]

And consumers are using these apps. One survey concluded that more than three-quarters of Americans used their bank's mobile app in one recent year,[23] while Bank of America alone claims thirty million active users of its mobile banking app.[24] By 2016, about 33% of credit card customers were receiving their periodic statements only electronically.[25] A 2019 survey

(reporting that consumers can apply on mobile phones for personal loans, auto loans, payday loans, and car title loans). For an example of a web site offering loans on the phone, *see Loans by Phone - Apply on the Go!*, PAYDAYSAY [https://perma.cc/6HWR-595F], (last visited Sept. 18, 2023).

18. *See* Damjan Jugowice Spajic, *Mobile Banking Statistics That Show Wallets Are a Thing of the Past*, DATAPROT (July 14, 2023), [https://perma.cc/LH3S-QL7Y] (explaining payments made on smartphones in 2023 exceeded $1 trillion).

19. *See* Emily Roth, *How to Mobile Deposit a Check With Your Smartphone*, U.S. NEWS & WORLD REP. (Mar. 10, 2023, 9:00 AM), [https://perma.cc/Z5YY-V6HM].

20. *See* Spajic, *supra* note 18 (reporting that 79% of mobile phone owners used their phone to make a purchase in the previous six months).

21. *See Apple Card Launches Today for All US Customers*, APPLE NEWSROOM (Aug. 20, 2019), [https://perma.cc/DPG9-Y59F]. It has since become available through iPads. *See iPad User Guide*, APPLE, [https://perma.cc/U69Y-YZDR] (last visited Sept. 18, 2023).

22. *See* Jim Marous, *How Banks Are Arming to Win the Digital Lending War with Fintechs*, THE FIN. BRAND (Sept. 13, 2021), [https://perma.cc/ET4N-ZM96]. On banking apps, consumers can:

> review transactions (and dispute fraudulent ones), make payments, transfer balances, request cash advance PINs, activate new cards, request replacement cards, download full account statements, receive information about other card benefits, add or remove an authorized user from their accounts, inform their issuer of upcoming travel, report a card lost or stolen, change their account's due date, or send and read messages to and from account servicing professionals or chat with them in real-time. . . . [I]ncluding card freezing, management of recurring card payments, additional card usage controls, and interactive digital interfaces for card balance payments.

CFPB, 2021 CREDIT CARD MARKET, *supra* note 17, at 170.

23. *See Mobiquity Featured in Forbes Advisor: 76% of Americans Bank via Mobile App—Here Are the Most and Least Valuable Features*, MOBIQUITY (Feb. 24, 2021), [https://perma.cc/3BLT-MGZ4].

24. Spajic, *supra* note 18; CBFP, 2021 CREDIT CARD MARKET, *supra* note 17, at 171 (64% of credit card accounts enrolled in mobile apps as of 2020).

25. *See* CONSUMER FIN. PROT. BUREAU, THE CONSUMER CREDIT CARD MARKET 166 (2017) [hereinafter CFPB, 2017 CREDIT CARD MARKET], [https://perma.cc/JF7C-ZVKF].

concluded that 56.29% of American adults, representing 142,910,138 people, had made mobile payments in the previous year.[26] The COVID-19 pandemic doubtlessly increased that number as consumers and retailers expanded their use of contactless payments.[27] In the words of former Consumer Bankers Association president Richard Hunt, "[f]or many people [the iPhone] *is* their bank."[28]

But when this form of fintech—smartphones—is combined with disclosure laws, lawmakers risk creating a mismatch. The laws mandating many disclosures in use today, like TILA, were created before the smartphone era.[29] Indeed, many were enacted in an age of paper before the invention of the Internet.[30] Nevertheless, when transactions take place via smartphone, disclosures may be provided that way.[31] All this raises the question our study was designed to address: can consumers decipher disclosures on minuscule smartphone screens or, for that matter, on the larger screens of laptops and desktops? To answer that question, we conducted the first known survey in which we

26. *See Are Americans Embracing Mobile Payments?*, PEW (Oct. 3, 2019), [https://perma.cc/N7QH-TBWV]; *New Survey: Americans Overwhelmingly Believe Banks Doing Good Job Helping Consumers Avoid Scams and Keeping Accounts Secure*, CONSUMER BANKERS ASS'N (Mar. 27, 2023), [https://perma.cc/K7Q6-BEL8] (58% of respondents frequently use mobile banking to make transfers between accounts, deposit checks, or pay bills).

27. *See 451 Research: 2020 Year-In-Review Infographic*, S&P GLOB. (Feb. 17, 2021), [https://perma.cc/8WAE-H6TH] ("Nearly 1 in 5 consumers started using contactless payments for the first time during the COVID-19 outbreak while almost 1 in 3 increased usage . . . .").

28. Hunt made the statement on a podcast. Colin Hogan, *How the Banking Industry–and Washington–Have Changed Since 2009*, SMARTBRIEF (June 30, 2022) (emphasis added), [https://perma.cc/3J5Q-9LTW]; *see also* CONSUMER FIN. PROT. BUREAU, TASKFORCE ON FEDERAL CONSUMER FINANCIAL LAW REPORT 42 (2021) [hereinafter CFPB TASKFORCE], [https://perma.cc/FN5F-NBBB] ("Today, some customers would rather take out a mortgage online at home or on their phone than in person at a bank . . . .").

29. *See* CFPB TASKFORCE, *supra* note 28, at 42 ("Many of our rules and regulations around disclosures were written decades before the widespread adoption of digital technology.").

30. *See id.*

31. One survey found that 41% of respondents said they would feel somewhat or very comfortable completing loan applications on a smartphone or tablet, and 20% said they had signed loan documents electronically on a smartphone or tablet. *See Expectations & Experiences: Borrowing and Wealth Management Fall 2019*, FISERV, [https://perma.cc/LCD4-FXTS] (last visited Sept. 19, 2023); *Digital Loan Applications Rise as Mobile Device Use Increases*, BUS. WIRE (Oct. 21, 2019, 8:30 AM), [https://perma.cc/286N-7FWX].

showed federally mandated loan disclosures to 330 consumers on smartphones ("Smartphone Readers") and to another group of 329 who saw the same disclosures on laptop or desktop computers ("Computer Readers").[32]

This paper presents three important findings. First, the question we intended our survey to answer: we found that Computer Readers understand credit card disclosures at a significantly higher rate than Smartphone Readers.[33] As to some disclosures, those who read them on paper understood them better still, as we discuss below.[34]

But when we drilled down into the data, we discovered that the difference between Computer Readers and Smartphone Readers depended entirely on which smartphone our respondents used.[35] Samsung phone users performed significantly better than those who used Apple phones.[36] We also found a statistically significant difference between Android users and Apple users, but because we did not find a significant difference between the performance of those who used Android but not Samsung—that is, Motorola and LG phone users—we concluded that the difference between Android users and Apple users was driven by Samsung users.[37] And we found that the difference between Samsung users and non-Samsung Android users approached significance.[38] We caution, however, that as we had only thirty-eight non-Samsung Android users,[39] we cannot be certain that the difference between Android and Apple users was entirely attributable to Samsung. Additional research will be necessary to determine that. Pending that additional research, for the balance of this paper, when it is relevant, we focus on the difference between Samsung and Apple users rather than Android and Apple users.

Thus, lenders, including predatory lenders, who offer consumers less favorable terms may still find borrowers simply

32. *See infra* Table 6.
33. *See* discussion *infra* Section IV.A.1.
34. P = 0.078. *See infra* Table 2.
35. *See* discussion *infra* Section IV.A.1.
36. *See infra* Table 1B.
37. *See infra* Table 1B; *see infra* Table 7A.
38. *See infra* Table 1B; *see infra* Table 7A.
39. *See infra* Table 7A.

because the borrowers cannot make sense of the disclosures that are intended to protect them from expensive or even predatory loans. In other words, when disclosures are made on iPhones, and sometimes even computers, for some consumers the difference between disclosure and no protection may evaporate, and consumers will be left without any protection at all.

Serendipitously, our study also provided two other findings. The study revealed that many consumers, whether on a smartphone or computer, simply cannot understand the credit card disclosures in use.[40] But the answer is not simply to provide the disclosures on paper. A 2008 study found that respondents could not understand more than a third of the credit card disclosures on which today's forms are based.[41] In other words, while some consumers will be able to distinguish PredCard and CompCard, millions of others will find today's mandated disclosures inadequate to distinguish between them, whether the disclosures are provided on paper, a computer screen, or the screen of a mobile phone. Disclosures alone will not prevent many consumers from being charged excessive prices for credit.

The third major finding arises from the fact that, in 2009, Congress limited the amounts that credit card issuers may charge for penalty fees, but not other fees or, for that matter, penalty interest rates.[42] TILA requires the disclosure of both types of fees, as well as penalty interest rates.[43] You might suppose that lawmakers would limit the fees that are hardest to understand because consumers would have greater difficulty protecting themselves from things they could not comprehend. However, we found that consumers had a significantly better understanding of the disclosures of fees subject to limits than the fees and penalty interest rates not subject to limits.[44] In other words, to the extent that the decision as to which fees and rates should be limited by law is based on the difficulty of understanding the fees, Congress got the decision exactly wrong.

40. *See* discussion *infra* Section IV.B.
41. *See* discussion *infra* Section IV.B.
42. *See infra* notes 91-95 and accompanying text.
43. 15 U.S.C. § 1637(b)(12)(A)-(B) (2010).
44. *See* discussion *infra* Section IV.C.

This Article proceeds as follows: Part I presents some basics on consumer protections for credit cards.[45] Part II reviews the literature concerning disclosures on smartphones.[46] Part III discusses our methodology.[47] Part IV reports our findings.[48] Part V suggests some normative implications.[49]

I. CONSUMER PROTECTIONS AND CREDIT CARDS

A. Disclosure

Disclosure is a ubiquitous feature of consumer protection law.[50] For example, suppose you receive a solicitation for a credit card. TILA and its implementing regulation, known as Regulation Z,[51] require that the solicitation include a set of disclosures.[52] Perhaps in response to the solicitation, you obtain a credit card. You get another TILA-mandated disclosure about the credit terms,[53] accompanied by still another disclosure, compelled by a separate law, about your privacy rights.[54] You charge some items to the credit card and receive your statement. The form of that statement, too, is determined by TILA and Regulation Z.[55] If you miss some payments and the credit card issuer so reports to a credit bureau, you get an additional disclosure under still another federal law.[56] If the credit card issuer hires a debt collector, a fourth federal statute requires another disclosure.[57] Lawmakers have created a golden age of consumer disclosures.

45. *See infra* Part I.
46. *See infra* Part II.
47. *See infra* Part III.
48. *See infra* Part IV.
49. *See infra* Part V.
50. *See* Mathew A. Edwards, *The Virtue of Mandatory Disclosure*, 28 NOTRE DAME J.L. ETHICS & PUB. POL'Y 47, 47 (2014) ("During the past fifty years mandatory disclosure has emerged as a dominant method of legal regulation in the United States.").
51. 12 C.F.R. § 1026.1 (2023).
52. *See* 12 C.F.R. § 1026.6(b) (2023).
53. *See* 12 C.F.R. § 1026.6(b).
54. *See* 12 C.F.R. § 1016.4(a) (2023).
55. *See* 12 C.F.R. § 1026.7 (2023).
56. *See* 15 U.S.C. § 1681s-2(a)(7)(A) (2020).
57. *See* 15 U.S.C. § 1692g(a) (2006).

Disclosure has the virtue of being inexpensive.[58] It also minimizes limits on personal choice, a feature attractive to libertarians.[59] But it has significant disadvantages. Considerable evidence suggests that many—indeed, probably most—consumers ignore disclosures.[60] Indeed, even consumer law professors give disclosures short shrift.[61] To the extent that mandated disclosures undermine or even belie selling points—something that may occur with predatory lenders, for example—the merchants and lenders who provide the disclosures have an incentive to obscure the disclosures.[62] Nevertheless, inasmuch as disclosures provide the only protections against some risks for consumers, it is important that consumers who wish to use them should be able to comprehend them. Otherwise, we might as well be back in the pre-TILA days in which consumers could not compare competing offers,[63] or disclosures may as well be written in gibberish. Untold resources have been devoted to designing disclosure rules, complying with them, and litigating over whether they complied with applicable laws;[64] in short, to ensuring that the undetermined number of consumers who read disclosures can understand them.

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58. *See Thomas A. Durkin, Credit Card Disclosures, Solicitations, and Privacy Notices: Survey Results of Consumer Knowledge and Behavior*, 92 FED. RSRV. BULL. A109, A109 (2006) ("Disclosure requirements may also be less costly for financial institutions to implement and for the government to enforce than consumer protection approaches that limit product features.").

59. *See* CFPB TASKFORCE, *supra* note 28, at 37 ("[D]isclosure is a more attractive approach to consumer protection than is substantive regulation of financial products and services because it respects consumer preferences and allows for the different circumstances of different consumers.").

60. OMRI BEN-SHAHAR & CARL E. SCHNEIDER, MORE THAN YOU WANTED TO KNOW: THE FAILURE OF MANDATED DISCLOSURE 67-69, 75 (2014); *see also* Jeff Sovern, Elayne E. Greenberg, Paul F. Kirgis & Yuxiang Liu, *"Whimsy Little Contracts" with Unexpected Consequences: An Empirical Analysis of Consumer Understanding of Arbitration Agreements*, 75 MD. L. REV. 1, 15-29 (2015).

61. *See* Jeff Sovern, *Another Survey of Consumer Law Professors Fails to Find Any Who Always Reads Consumer Contracts Before Signing Them*, CONSUMER L. & POL'Y BLOG (June 17, 2019), [https://perma.cc/98C3-SGPC] (surveying consumer law professors and finding that not one responding professor always reads required disclosures while 45% rarely read them).

62. *See* Jeff Sovern, *Preventing Future Economic Crisis Through Consumer Protection Law or How the Truth in Lending Act Failed the Subprime Borrowers*, 71 OHIO ST. L.J. 761, 805-07 (2010) [hereinafter Sovern, *TILA*].

63. *See supra* note 9-11 and accompanying text.

64. *See* BEN-SHAHAR & SCHNEIDER, *supra* note 60, at 169-70.

B. Truth in Lending Act

Perhaps the paradigmatic disclosure statute is TILA.[65] Enacted in 1968 and amended many times since, TILA is the chief federal statute governing lending disclosures.[66] It applies to mortgages,[67] credit cards,[68] auto loans,[69] private student loans,[70] car leases,[71] home equity loans,[72] and other consumer loans.[73] Our focus in this Article will be on credit card disclosures, though our findings that consumers understand disclosures less well on smartphones can almost certainly be generalized to other types of consumer disclosures as well.

TILA requires two sets of credit card disclosures of particular relevance to this Article. First, TILA obliges credit card solicitations to include a table setting out various disclosures, known as the Schumer Box—named after then-Representative Charles Schumer.[74] Second, TILA requires credit card issuers to provide consumers with a periodic statement, typically supplied monthly, that lists the transactions charged and credited to the credit card account, interest rate terms, and the like.[75] If you have a credit card, you have surely seen the periodic statement, and you have probably seen a Schumer Box, though you may not recall doing so.[76]

C. What Does Disclosure Require?

Perhaps the most frequently stated requirement for mandated disclosure is that the disclosures be "clear and conspicuous," and

65. *See generally* Truth in Lending Act, 15 U.S.C. §§ 1601-1667(f) (2021).

66. *See* Will Kenton, *Truth in Lending Act (TILA): Consumer Protections and Disclosures*, INVESTOPEDIA (Sept. 29, 2022), [https://perma.cc/EGV2-TNW8].

67. *See* 15 U.S.C. § 1639 (2018).

68. *See* 15 U.S.C. § 1637(c) (2010).

69. *See* 15 U.S.C. § 1638 (2010).

70. *See* 15 U.S.C. § 1638(e).

71. *See* 15 U.S.C. § 1667a (2010).

72. *See* 15 U.S.C. § 1647 (2010).

73. *See* 15 U.S.C. § 1638.

74. *See* 15 U.S.C. § 1637(c) (2010); Julia Kagan, *Schumer Box: What It Is and How It Works*, INVESTOPEDIA (Apr. 30, 2021), [https://perma.cc/S6R3-KC8X].

75. *See* 15 U.S.C. § 1637(b).

76. *See infra* Bank A, Bank B in Appendix A.

indeed TILA requires just that for credit card disclosures.[77] Occasionally, Congress has expressed similar ideas in other ways. Certain debt collection disclosures cannot be "overshadow[ed]" by other communications.[78] Warranties must be "fully and conspicuously disclose[d]."[79]

The Official Commentary to Regulation Z, the regulation that implements and interprets TILA, states that "[t]he 'clear and conspicuous' standard generally requires that disclosures be in a reasonably understandable form. Disclosures for credit card applications and solicitations [and] . . . highlighted change-in-terms disclosures . . . must also be readily noticeable to the consumer."[80] For purposes of our survey, the "readily noticeable" standard applies to the Schumer Box and the change-in-terms disclosure in the periodic statement but not to the other parts of the periodic statement that our survey inquired about.[81]

Leading jurists have debated what qualifies as clear and conspicuous. Unfortunately, their debate suggests that the meaning of the word "clear" is itself not clear. According to Judge Easterbrook, "'Clear and conspicuous manner'. . . means *visible*, not *simple*."[82] "'Manner' refers to the mode of presentation, not the degree of comprehension."[83] In other words, an incomprehensible but visible disclosure would be sufficient.

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77. 15 U.S.C. § 1632(a) (2010).

78. *See* 15 U.S.C. § 1692g(b) (2006).

79. *See* 15 U.S.C. § 2302(a) (2015).

80. 12 C.F.R. pt. 1026, Supp. I, Part 1, Subpart B, cmt. 5(a)(1)-1 (2023).

81. The Commentary also explains that the "readily noticeable" standard means that the disclosures must appear in at least a ten-point font. *See* 12 C.F.R. pt. 1026, Supp. I, Part 1, Subpart B, cmt. 5(a)(1)-3. Because disclosures on screens may be adjusted to be too small to satisfy the ten-point font requirement, especially on a mobile phone screen, providing electronic disclosures may seem to violate that provision. But Regulation Z expressly permits electronic disclosure of the periodic statement if the consumer agrees to receive it electronically, and of the Schumer Box even in the absence of consumer consent. *See* 12 C.F.R. § 1026.5(a)(1)(iii) (2023). It seems unlikely that Congress intended the statute to have been violated merely because a consumer pinches a screen so that the font is smaller than ten points, especially as the consumer would have the option of expanding the font to even more than a ten-point size.

82. Channell v. Citicorp Nat'l Servs., Inc., 89 F.3d 379, 382 (7th Cir. 1996). Credit card disclosure requirements typically say only that the disclosures must be made "clearly and conspicuously." 12 C.F.R. § 1026.5(a)(1)(i). Unlike the text interpreted by the cases, the statute does not use the word "manner." 12 C.F.R. § 1026.5(a)(1)(i). Still, it is unclear that use of the word "manner" changes the standard.

83. *Channell*, 89 F.3d at 382.

Then-Circuit Judge Alito, writing for the Third Circuit, disagreed, and relied on an administrative interpretation to conclude that a disclosure is not clear unless it is "reasonably understandable."[84] But, Judge Alito continued, disclosures need not be within "the understanding of the average consumer."[85] In the Third Circuit's view, a disclosure of a technical term, like "constant yield method," is reasonably understandable and thus clear and conspicuous, even if the phrase means nothing to the average consumer.[86] By either standard, credit card disclosures that average consumers could not comprehend would be acceptable, though Judge Alito would limit that to disclosures that have a technical meaning understood by those in the industry.[87] We will have more to say about this in Section V.B.[88]

In 2007, the Federal Reserve, the Consumer Financial Protection Bureau's ("CFPB") predecessor in regulating many consumer credit disclosures, took the position that disclosures are sufficient "as long as they are provided in a manner such that they would be clear and conspicuous when viewed on a typical home personal computer monitor."[89] But much has changed since 2007, the year the iPhone was first sold in the United States,[90] and this Article calls that stance into question.

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84. *See* Applebaum v. Nissan Motor Acceptance Corp., 226 F.3d 214, 220 (3d Cir. 2000).

85. *Id.*; *but see* Lundquist v. Sec. Pac. Auto. Fin. Servs. Corp., 993 F.2d 11, 15 (2d Cir. 1993) (per curiam) (finding disclosure that is "beyond the understanding of the average consumer" is not reasonably understandable).

86. *See Applebaum*, 226 F.3d at 221.

87. *Id.*

88. *See* discussion *infra* Section V.B.1.

89. *See* Truth in Lending, 72 Fed. Reg. 63462, 63471 (Nov. 9, 2007) (codified at 12 C.F.R. pt. 226). Regulation E, 12 C.F.R. § 1005.18 (2023), which implements the Electronic Fund Transfers Act, 15 U.S.C. § 1693 (2010), includes a provision governing prepaid cards adopted in 2016 that specifically refers to disclosures provided on mobile applications, and states that the disclosures "must be viewable across all screen sizes" and "must be provided in a manner which is reasonably expected to be accessible in light of how a consumer is acquiring the prepaid account." 12 C.F.R. § 1005.18(b)(6)(i)(B).

90. *See* Major Dan, *June 29, 2007: Apple Introduces the iPhone (First Apple Cell Phone)*, HIST. & HEADLINES (Apr. 15, 2020), [https://perma.cc/HJF8-V4GZ].

D. The Credit CARD Act

In 2009, Congress decided that disclosure did not do enough to protect consumers from some credit card terms, decried by consumer advocates as "tricks and traps."[91] Consequently, Congress enacted the Credit CARD Act, which added to TILA some protections that went beyond disclosure.[92] Among the Credit CARD Act provisions pertinent to this Article, one provides that the penalty fees issuers can charge consumers "shall be reasonable and proportional" to the behavior for which the consumer incurred the penalty fee.[93] Congress also invited regulators to create a safe harbor penalty fee amount that would presumptively be reasonable and proportional.[94] Though the Credit CARD Act did not limit the amount of penalty *interest rates*, it did provide that a credit card issuer could not charge a penalty rate for late payments unless the consumer had failed to make the minimum payment for sixty days.[95] The Credit CARD Act also obliges credit card issuers to give at least forty-five days advance notice of general increases in interest rates, fees, or

91. *See Elizabeth Warren on Credit Card 'Tricks and Traps'*, NOW ON PBS (Jan. 2, 2009), [https://perma.cc/QTG3-FFXS].

92. *See* Credit Card Accountability Responsibility and Disclosure Act of 2009, Pub. L. No. 111-24, 123 Stat. 1734 (2009) (codified as amended in scattered sections of 15 U.S.C.); *see generally* Mary Beth Matthews, *The Credit CARD Act of 2009 — What Is It, and What Does It Do?*, 2010 ARK. L. NOTES 65.

93. *See* 15 U.S.C. § 1665d(a) (2010). The statute directs the CFPB, in consultation with other federal financial regulators, to issue rules that establish standards for assessing whether fee amounts are reasonable and proportional. 15 U.S.C. § 1665d(b). In doing so, the CFPB is to consider "(1) the cost incurred by the creditor from such omission or violation; (2) the deterrence of such omission or violation by the cardholder; (3) the conduct of the cardholder; and (4) such other factors as the [CFPB] may deem necessary or appropriate." 15 U.S.C. § 1665d(c).

94. *See* 15 U.S.C. § 1665d(e). At the time Congress enacted the Credit CARD Act, it had not yet created the CFPB, and so Congress gave the Federal Reserve the power to create the safe harbor. Credit Card Penalty Fees (Regulation Z), 88 Fed. Reg. 18906, 18907 (proposed Mar. 28, 2023). When Congress created the CFPB the following year in the Dodd-Frank Wall Street Reform and Consumer Protection Act, it transferred that power to the CFPB. *See* Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111–203, § 1011(a), 124 Stat. 1376, 1964 (2010) (codified at 12 U.S.C. § 5491).

95. 15 U.S.C. § 1666i-1(b)(4) (2009). The card issuer must also provide the consumer with "a clear and conspicuous written statement of the reason for the increase." 15 U.S.C. § 1666i-1(b)(4)(A). If the consumer makes the minimum payments for the next six months, the card issuer may no longer charge the penalty rate after that time. 15 U.S.C. § 1666i-1(b)(4)(B).

finance charges.[96] And Congress attempted to bar the use of cards that charged excessive fees, known as fee-harvester cards.[97] Thus, Congress prohibited credit cards that require the consumer to pay, during the first year of use, non-penalty fees (that is, fees other than a late fee, fees for a check returned for insufficient funds, and over-the-limit fees) of more than a quarter of the amount of the consumer's credit limit.[98]

The regulators used Regulation Z to accept Congress's invitation to create a safe harbor for penalty fees.[99] As of 2022, issuers may presumptively charge penalty fees of $30 for a first violation, and $41 for a second violation during the following six billing cycles.[100] In 2023, the CFPB proposed to reduce the safe harbor amount to $8,[101] a proposal that drew scathing criticism from the financial industry.[102]

But while credit card issuers are limited as to what they can charge for penalty fees, they are free to charge as much as they can get with other fees, such as balance transfer fees, cash advance fees, and annual fees, as long as they do not exceed the

96. 15 U.S.C. § 1637(i)(1)-(2) (2010).

97. *See* Credit Card Accountability Responsibility and Disclosure Act of 2009, Pub. L. No. 111-24, § 105, 123 Stat. 1734, 1741-42 (codified as amended at 15 U.S.C. § 1637).

98. 15 U.S.C. § 1637(n)(1) (2010).

99. *See* 12 C.F.R. § 1026.52(b)(ii) (2021). Initially, the Federal Reserve had responsibility for creating the safe harbor and did so, and the Consumer Financial Protection Bureau preserved the safe harbor when it inherited Regulation Z. *See* Credit Card Penalty Fees (Regulation Z), 88 Fed. Reg. 18906, 18907 (Mar. 29, 2023) (to be codified at 12 C.F.R. § 1026).

100. 12 C.F.R. § 1026.52(b)(ii). As of 2019, the average late fee for a first-time late payment was $26 and for later payments in a six-month billing period, more than $34. *See* CONSUMER FIN. PROT. BUREAU, CREDIT CARD LATE FEES 2 (2022), [https://perma.cc/C6JK-WBLZ]. Issuers assessed $14 billion in late fees in 2019. *Id.* According to the CFPB, "Credit card late fees disproportionately burden consumers in low-income and majority-Black neighborhoods." *Id.* Indeed, the CFPB found that "the overall credit card market continues to rely on late fees disproportionately paid by economically vulnerable consumers." *Id.* More than half of the consumer fees assessed by credit card issuers consisted of late fees, and late fees constituted 99% of total credit card penalty fees. *Id.* The report also found that late fees represented 7% of total interest and fees in 2019 for general purpose cards. *Id.* at 13.

101. Credit Card Penalty Fees (Regulation Z), 88 Fed. Reg. 18906, 18906 (Mar. 29, 2023) (to be codified at 12 C.F.R. § 1026).

102. *See, e.g.*, *CFPB's Proposed Rule on Credit Card Late Fees Is Not What It Seems*, CONSUMER BANKERS ASS'N (Apr. 17, 2023), [https://perma.cc/86EB-9HVK].

threshold for fee-harvester cards.[103] Nor, for the most part, are these fees limited by usury laws.[104] To be sure, historically, and still today in a limited number of situations, state usury laws protected consumers from excessive charges for loans.[105] But aided by the United States Supreme Court, credit card issuers and many other consumer lenders have found a way to avoid state usury laws.[106] In 1978, the Supreme Court interpreted the National Bank Act to provide that when national banks based in one state lend money to consumers domiciled in another state, the loans are bound only by the usury laws of the states where the lenders are based.[107] The usury laws of the consumer's home state are preempted.[108] A later case extended this so-called "exportation doctrine" to credit card late fees, meaning that credit card issuers could charge late fees, and presumably other fees, in amounts banned by the consumer's home state as long as the issuer's home state permitted them.[109] Credit card issuers responded by moving to states with more lenient usury laws or

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103. *See* 12 C.F.R. pt. 1026, Supp. I, Part 4, Subpart G, cmt. 52(a)(2)(1)(iii) (2023). For consumers who pay off their balance each month, fees constitute their main expense for credit cards. *See* CFPB, 2021 CREDIT CARD MARKET, *supra* note 17, at 52. Overall, fees constitute about one-fifth of consumer credit card costs. *Id*. Credit card issuers charged consumers more than $23 billion in fees in 2019, and even in the pandemic year of 2020 when many issuers waived some fees, assessed more than $20 billion in fees. *Id*. For consumers with poor credit scores, fees represent a much higher percentage of the total cost compared to those with better credit scores. *See id.* at 52-53. For example, for deep subprime consumers, fees make up more than 9% of total costs, while fees make up less than 3% of superprime consumers' total costs. *Id*. at 53.

104. *See* Richie Bernardo, *Usury Laws by State, Interest Rate Caps, the Bible & More*, WALLETHUB (Jan. 10, 2023), [https://perma.cc/D8VT-3QVH]. Annual fees have been increasing and, as of 2020, averaged $94 per credit card. *See* CFPB, 2021 CREDIT CARD MARKET, *supra* note 17, at 58. Fewer credit cards carry an annual fee than was formerly the case. *Id.* at 59. As of 2020, fewer than one in five credit cards charged an annual fee. *Id*. at 60.

105. *See* Raychelle Heath, *What Are Usury Laws and Maximum Interest Rates?*, BANKRATE (Apr. 13, 2023), [https://perma.cc/YL6N-37DG].

106. *See* Marquette Nat'l Bank of Minneapolis v. First of Omaha Serv. Corp., 439 U.S. 299, 301 (1978); Smiley v. Citibank (S.D.), N.A., 517 U.S. 735, 744 (1996).

107. *See Marquette Nat'l Bank of Minneapolis*, 439 U.S. at 301.

108. *See id.*

109. *See Smiley*, 517 U.S. at 744-47. The *Smiley* Court deferred to a regulation by the relevant administrative agency, the Office of the Comptroller of the Currency. *Id.* Among the fees listed in the regulation are "numerical periodic rates, late fees, creditor-imposed not sufficient funds (NSF) fees charged when a borrower tenders payment on a debt with a check drawn on insufficient funds, overlimit fees, annual fees, cash advance fees, and membership fees." 12 C.F.R. § 7.4001(a) (2020).

states that lacked usury laws altogether to avoid usury caps.[110] Consequently, when it comes to most credit card fees not limited by the Credit CARD Act, the only protection most consumers get is a disclosure that is intended to enable them to discern whether the credit card's terms meet their needs.[111] That makes it especially important that consumers can understand those disclosures. We will see in Part IV how ineffective the actual credit card disclosures are at accomplishing that goal for many consumers.[112]

II. DISCLOSURE ON MOBILE PHONES

Some researchers have explored consumer understanding of information presented on smartphones and compared it with consumer understanding of information presented on larger computer screens. Their findings have not always been consistent, perhaps because smartphones and their screen sizes have evolved over time, or because consumers have become more accustomed to conducting transactions on phones. For better or worse, the studies did not explore consumer understanding of mandated disclosures on smartphones.

A 2016 study presented readers with 404-word articles written at an eighth-grade reading level and 988-word articles written at a twelfth-grade level and found that readers understood the articles at least as well on their mobile phones, but it took them longer to read the more difficult passages on a mobile phone.[113] On the other hand, a 2011 study of reader comprehension of privacy policies that used a cloze test found that, on average,

110. *See* U.S. GOV'T ACCOUNTABILITY OFF., GAO-06-929, CREDIT CARDS: INCREASED COMPLEXITY IN RATES AND FEES HEIGHTENS NEED FOR MORE EFFECTIVE DISCLOSURES TO CONSUMERS 12 (2006) [hereinafter GAO REPORT] ("As a result [of the exportation doctrine], the largest banks have located their credit card operations in states with laws seen as more favorable for the issuer with respect to credit card lending."). In consequence, one commentator has described most state usury laws as an illusion. *See* James J. White, *The Usury* Trompe L'Oeil, 51 S.C. L. REV. 445, 447 (2000).

111. An exception: credit card issuers are subject to a usury limit as to their customers in the military and their families. *See* 10 U.S.C. § 987(c) & (i)(1) (2016); 32 C.F.R. § 232.4(b) (2023).

112. *See* discussion *infra* Section IV.B.

113. Kate Moran, *Reading Content on Mobile Devices*, NIELSEN NORMAN GRP. (Dec. 11, 2016), [https://perma.cc/XH9G-T9V7].

readers understood more than twice as much on a desktop screen as they did on a smartphone screen.[114] Additionally, a 2022 paper found that those who read texts on smartphones understood them less well than those who read the same texts on paper.[115] The 2011 study offered speculations as to why people had more difficulty understanding what they read on a smartphone, including that the smaller size of the screens meant the information they were trying to take in could not all fit one screen, so they had to scroll back and forth more, thus introducing a distraction that impaired recall and further reduced comprehension.[116] A 2010 study of mobile devices found that

> a reduction in screen size leads consumers to acquire less information, spend less time per acquisition, spend less time on information acquisition, and be more likely to process by attribute than by alternative. This leads to significant declines in decision quality but these declines are not as large as might be expected . . . .[117]

Similarly, Tim Samples has observed that, unlike paper documents, smartphones themselves generate distractions, such as notifications.[118] Finally, a 2018 meta-study found people understood texts better when they read them on paper than on screens.[119]

III. METHODOLOGY

In 2004, the Federal Reserve, then the agency principally responsible for implementing and interpreting TILA, initiated an effort "to produce revised and improved credit card disclosures

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114. *See* R. I. Singh et al., *Evaluating the Readability of Privacy Policies in Mobile Environments*, 3 INT'L J. MOBILE HUM. COMPUT. INTERACTION 55, 69, 71 (2011).

115. *See* Motoyasu Honma et al., *Reading on a Smartphone Affects Sigh Generation, Brain Activity, and Comprehension*, 12 SCI. REP. 1589, 1589 (2022).

116. *See* Singh et al., *supra* note 114, at 71-72.

117. Nicholas H. Lurie et al., *Decision Making on the Small Screen: Adaptive Behavior in Constrained Information Environments*, 37 ADVANCES IN CONSUMER RSCH. 459, 459 (2010).

118. Tim R. Samples, *Consumer Contracting in the Smartphone Era: New Challenges, An Old Conundrum*, EMERGING ISSUES AT THE INTERSECTION OF COMMERCIAL L. & TECH. (forthcoming 2023), [https://perma.cc/VB54-YG24].

119. *See* Pablo Delgado et al., *Don't Throw Away Your Printed Books: A Meta-Analysis on the Effects of Reading Media on Reading Comprehension*, 25 EDUC. RSCH. REV. 23, 34 (2018).

that consumers will be more likely to pay attention to, understand, and use in their decisions, while at the same time not creating undue burdens for creditors."[120] The Federal Reserve decided to accomplish that goal by testing consumer understanding of various forms of credit card disclosures and, in 2006, retained Macro International ("Macro") to conduct the tests.[121] Among other tasks, Macro conducted a quantitative study[122] ("Macro Study") that involved approaching consumers at various shopping malls (so-called mall intercepts) and asking them to participate in interviews.[123] Ultimately, Macro interviewed 1,022 consumers during the quantitative phase.[124] Much of the interview consisted of showing the consumers various credit card forms, including versions of the Schumer Box and a periodic statement, and asking them questions about the forms to see if they could answer them correctly.[125] The Federal Reserve later amended its disclosure forms in light of Macro's findings.[126]

Our study builds to some extent on the Macro Study. Our survey's first goal was to determine how well consumers understood disclosures when presented on a smartphone relative to their understanding when the same disclosures appeared on paper, a desktop, or a laptop.[127] To that end, our survey posed

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120. Truth in Lending, 74 Fed. Reg. 5244, 5246 (Jan. 29, 2009) (codified at 12 C.F.R. pt. 226).

121. *Id.* at 5246-47.

122. Macro's quantitative research is reported in MACRO INT'L INC., DESIGN AND TESTING OF EFFECTIVE TRUTH IN LENDING DISCLOSURES: FINDINGS FROM EXPERIMENTAL STUDY, at i (2008) [hereinafter MACRO STUDY], [https://perma.cc/R8FD-WZ79]. Macro also conducted qualitative research, reported in MACRO INT'L INC., DESIGN AND TESTING OF EFFECTIVE TRUTH IN LENDING DISCLOSURES: FINDINGS FROM QUALITATIVE CONSUMER RESEARCH (2008), [https://perma.cc/RPR2-URTW].

123. MACRO STUDY, *supra* note 122, at ii.

124. *Id.*

125. *Id.*

126. *See* Truth in Lending, 74 Fed. Reg. 5244, 5244 (Jan. 29, 2009) (codified at 12 C.F.R. pt. 226).

127. The Macro Study is idiosyncratic in the way it reported its results. In a section captioned "Results and Analysis," the authors did not state the percentage of respondents who answered each question about the disclosure documents correctly; instead, the report provides "the predicted percentage of correct answers" to certain questions, noting in a footnote that the "observed percentages are in all cases very close to those shown." *See* MACRO STUDY, *supra* note 122, at 20 n.8. The Macro Study's Executive Summary does state the percentage of respondents who answered some questions correctly, but it does not report the data for other questions. *See id.* at iii. Consequently, we filed a Freedom of Information request with the Federal Reserve and obtained a copy of Macro's data. The

many of the same questions Macro asked during its study, except our respondents saw the questions and disclosures on either a smartphone, desktop, or laptop.[128]

The second goal of our survey was rooted in one of the purposes of TILA. TILA was intended to aid consumers in comparison shopping among different loan offerings.[129] Consequently, we wanted to ascertain how well consumers could discern which of two different forms offered better loan terms when they see those forms on a mobile phone.

Our instructions borrowed heavily from the Macro Study to maximize the ability to compare our results to theirs. Thus, before showing respondents a credit card solicitation, we asked:

> Please take a minute to review this form just as you would a real credit card offer you received. We will then ask you some questions about the offer. You will be able to look at the page when answering the questions, so you don't need to memorize any information.[130]

These instructions mirrored the Macro instructions, with only a change in a pronoun.

Nevertheless, in addition to the change in the medium through which consumers saw the disclosures, our survey differs in some respects from the Macro Study. First, the Macro respondents were questioned orally.[131] Our survey was conducted online using the Qualtrics platform.[132] The questions our respondents saw appeared on their smartphones or computers.[133] Second, we showed our survey takers forms nearly identical to the CFPB model forms in use today.[134] In contrast,

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comparisons we make in this paper to the Macro findings are based on the data we received from our FOIA request rather than the predicted percentage of correct answers appearing in the Macro Study. *See* FOIA Request: Macro Study Data (on file with author).

128. *See infra* Appendix A.

129. *See* 15 U.S.C. § 1601(a) (1976) ("It is the purpose of this subchapter to assure a meaningful disclosure of credit terms so that the consumer will be able to compare more readily the various credit terms available to him . . . .").

130. *See infra* Appendix A.

131. *See* MACRO STUDY, *supra* note 122, at ii, 15 n.6.

132. *See generally infra* Appendix A.

133. *See infra* Q2, Q4, Q5 in Appendix A; *see infra* text accompanying note 144.

134. Specifically, for the periodic statement, we used Model Form G-18(F) with some modifications in the terms to eliminate ambiguities and with the dates changed to 2022 rather than 2012, as in the model form. For the Schumer Box forms, we used Model Form G-

the Macro Study was based on prototype forms which were used to develop today's forms.[135] When we compare our results to the Macro results, we use the prototype forms most like today's forms.

Third, Macro's disclosures included material irrelevant to the questions posed, which may have increased the number of incorrect responses because of information overload and the need to wade through the irrelevant material.[136] Specifically, Macro's Schumer Box disclosures included an extra page of state law disclosures and billing rights disclosures, totaling nearly 900 words, considerably more than the number of words in the actual Schumer Box.[137] Macro included with the periodic statements mock marketing inserts with graphics and messages.[138] We did not show this extraneous material to our respondents.[139] In light of the fact that the Macro respondents saw additional and irrelevant disclosures and thus might have suffered information overload or been distracted, we would expect our respondents to perform better than the Macro respondents. In fact, as discussed in Part IV, the Macro respondents generally performed either as well or better than our respondents.[140]

Fourth, Macro included questions about disclosures that did not appear in the model disclosures as approved by the CFPB.[141] We saw no point in asking about them. Fifth, as already noted, our survey invited respondents to compare two different offerings, while the Macro Study did not seek such a comparison.[142]

Our survey, which appears in Appendix A, posed several types of questions. One type was simply demographic questions

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10(B), again with some modifications in the terms. *See infra* Appendix A; *see* 12 C.F.R. § 1026 app. G-10(B), G-18(F) (2023).

135. *See* MACRO STUDY, *supra* note 122, at i, 43.

136. *See id.* at 15 & n.5.

137. *See* MACRO STUDY, *supra* note 122, at app. A, Model 2, for an example of state law disclosures and billing rights disclosures included in Macro's Schumer Box disclosures.

138. For an example of the mock marketing inserts included with the periodic statements *see* MACRO STUDY, *supra* note 122, at app. F.

139. *See generally infra* Appendix A.

140. *See* discussion *infra* Section IV.A.

141. *See* MACRO STUDY, *supra* note 122, at 14.

142. *See infra* Q51, Q53, Q55, Q58 in Appendix A; *see* MACRO STUDY, *supra* note 122, at ii.

to ensure that our respondents mirrored the general population in terms of education, gender, age, region, ethnicity, and income.[143] Another group of questions focused on the nature of the device the respondent was taking the survey on: laptop, desktop, smartphone, and if the latter, what kind.[144] Another set of questions sought to test understanding of the terms in one or two Schumer Box credit card solicitations or of a monthly credit card statement.[145]

We took multiple steps to ensure that the respondents attempted to answer the questions correctly. First, we asked two attention check questions. After our respondents saw the first Schumer box in the survey, we asked "[w]hat kind of document did you just see?"[146] The 308 respondents who selected anything other than "[p]art of a credit card offer" were dropped from the survey.[147] Much further on, the survey asked respondents to "[p]lease click 'No' from the answers below."[148] The thirty-six respondents who clicked anything other than "[n]o" were also eliminated from the survey.[149] We infer from the fact that far fewer respondents failed to answer the second attention check question correctly that the first weeded out many who were not giving the survey appropriate attention.[150]

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143. *See infra* Q10, Q11, Q99, Q103, Q134, Q136 in Appendix A.

144. We excluded from the survey those who indicated that they were responding on a tablet. *See infra* Q2, Q4 in Appendix A.

145. *See infra* Q30, Q32, Q34, Q36, Q38, Q40, Q42, Q51, Q53, Q55, Q58, Q67, Q69, Q71, Q73, Q75, Q77, Q79, Q81, Q83, Q85, Q87, Q91, Q93, Q95, Q97 in Appendix A.

146. *See infra* Bank A, Q30 in Appendix A.

147. Incorrect choices included a cell phone contract, a letter summoning you to serve on a jury, and an offer of a rebate for buying a television. *See* infra Q30 in Appendix A.

148. *See infra* Q89 in Appendix A.

149. Incorrect selections included "[y]es" and "I don't know." *See infra* Q89 in Appendix A.

150. One methodological failing: ideally, we would have randomly assigned respondents to the smartphone condition or the laptop/desktop condition. Instead, respondents decided for themselves which device they would take the survey on. Because of this, it is possible that our results say only that those who elected to take the survey on their smartphones were less likely to answer correctly than those who decided to take it on their laptops or desktops. We view this possibility as far less likely an explanation for our results than that consumers perform less well on smartphones than on desktops or laptops. In any event, this methodological flaw has no impact on the overall results, the differences between items limited and not limited by the Credit CARD Act, or understanding of the terms for future transactions versus the verification of past transactions. *See* discussion *infra* Sections IV.B-D.

Second, to eliminate respondents who seemed to rush through the survey without taking it seriously, we omitted 303 respondents who completed the survey in less than a third of the median time overall. We also excluded respondents who chose "I don't know" for several questions in less than a third of the median response time on the theory that respondents who gave up trying to answer a question too quickly and selected "I don't know" were not doing their best to answer the survey.[151] Finally, when we received the data, we omitted 40 respondents whose answers reflected miscellaneous problems with the survey (e.g., that they could not open a link to the forms) or suggested that they had not actually attempted to ascertain the answer to particular questions (e.g., in response to a question about the amount of an interest rate, entering "economic" rather than a number). These latter exclusions may have caused our data to exaggerate consumer understanding of the disclosures, but we thought this a risk worth taking in the interest of securing data that is more likely to reflect what consumers who genuinely wanted to determine what the answers would conclude.

The survey asked twenty-five questions about the forms the respondents saw, though different respondents saw a different number of questions because of the survey design.[152] For example, respondents who said the monthly statement indicated that they would be charged an over-the-limit fee would then be asked a question about the amount of the fee while those who said that there would not be a fee would not see that question.[153]

151. The three questions were Q32, Q67, and Q77, and they resulted in the exclusion of 111, 53, and 52 respondents, respectively. *See infra* Q32, Q37, Q67 in Appendix A.

152. *See infra* Appendix A.

153. *See infra* Q38, Q40 in Appendix A.

IV. RESULTS, OR GOOD NEWS FOR PREDATORY LENDERS

A. Computer Readers, Smartphone Readers and (Sometimes) Macro Respondents Compared

1. Overall Results

As reflected in Table 1A, Computer Readers recorded significantly more correct answers than Smartphone Readers.[154] Collectively, Computer Readers answered correctly 62.3% of the time, while Smartphone Readers answered only 57.2% of the questions correctly.[155] Put another way, Computer Readers were, on average, about 9% more likely to provide correct answers. As to individual questions, Computer Readers scored significantly better than Smartphone Readers on nine of the matters the survey asked about.[156] On one question, Smartphone Readers did significantly better than Computer Readers.[157] On other individual questions, the differences between the two groups were not significant.[158]

However, the differences were not uniform among smartphones. The performance of our 116 Samsung users—62.5% correct answers—was not significantly different from the Computer Readers' accuracy.[159] In other words, the difference between Smartphone Readers and Computer Readers seems driven entirely by those who used smartphones other than Samsung.

Samsung, along with some other manufacturers, uses the Android operating system in its smartphones, while Apple uses the iOS operating system.[160] In an attempt to determine whether the relevant difference is the manufacturer or the operating

154. P = 0.002. *See infra* Table 1A.

155. *See infra* Table 1A.

156. *See infra* Table 1A.

157. That was the case with Q38, which asked whether a credit card holder would be charged a higher interest rate for exceeding the card's credit limit. *See infra* Table 1A; *infra* Q38 in Appendix A.

158. *See infra* Table 1A.

159. *See infra* Table 1B.

160. Nick Jasuja, *Android vs. iOS*, DIFFEN, [https://perma.cc/NYL2-UCBK] (last visited Sept. 21, 2023).

system, we compared non-Samsung Android users in our sample—users of LG and Motorola phones—to both Apple users and Samsung users. The differences between LG and Motorola users were not significantly different from Apple users, though that may be a function of the relatively small number—thirty-eight—of non-Samsung Android users in our study.[161] Similarly, the difference between Samsung users and LG/Motorola users, on average, approached significance.[162] Thus, we believe the use of the Samsung phone specifically rather than the Android operating system explains the different results, though we cannot be certain.

The following subsections go into more detail about the results for different kinds of questions.

2. The Schumer Box Questions

The survey posed six questions to test respondents' understanding of the Schumer Box (one question had two parts),[163] each based on a question also asked in the Macro Study. The questions asked consumers about the interest rates and fees they would be charged for balance transfers and going over the credit limit.[164] To keep our survey parallel to the Macro Study, we set it up so that respondents who answered particular questions differently would see different follow-up questions. For example, Q38 asked the respondents to identify what would happen if they exceeded their credit limit.[165] Possible answers were that they would be charged a fee or their interest rate would increase.[166] Both were correct and respondents could select one answer, both answers, indicate that nothing would happen, or choose "[o]ther."[167] Respondents indicating that they would be charged a fee—and only those respondents—saw an additional question

161. P = 0.50. *See infra* Table 7A.

162. P = 0.096. *See infra* Table 7A. We also ran two other tests. A Cohen's test produced a d of 0.055, considered a medium effect. On the other hand, a bootstrapping test did not indicate any differences between the groups. *See infra* Table 7B.

163. The questions were Q32, Q34, Q36, Q38, Q40, and Q42. *See infra* Appendix A.

164. *See infra* Q32, Q34, Q36, Q38, Q40, Q42 in Appendix A.

165. *See infra* Q38 in Appendix A.

166. *See infra* Q38 in Appendix A.

167. Respondents who selected other were prompted to specify what the other consequence of exceeding the credit limit would be. *See infra* Q38 in Appendix A.

asking what the fee would be;[168] respondents stating that the interest rate would increase—and again, only those respondents—were asked what the rate would be;[169] respondents choosing both answers saw both follow-up questions. With each question, respondents were invited to click on a link that would allow them to see the Schumer Box again.

As reflected in Table 3A, Computer Readers, with a mean of 3.95 correct answers,[170] significantly outscored Smartphone Readers, who averaged only 3.65.[171] In other words, respondents who saw the Schumer Box disclosures on computers understood them significantly better than those who saw them on their phones. But again, we do not see that difference with Samsung users. Thus, Samsung users averaged 3.97 correct responses,[172] while Apple users averaged 3.47 correct answers,[173] Motorola users averaged 3.67,[174] and LG users averaged 3.45.[175]

We also compared our results to the Macro Study results. The Macro Study tested eight different disclosure forms in an effort to ascertain which form consumers were best able to understand.[176] Because Macro's Schumer Box Model Eight is most like the Schumer Box forms currently in use, [177] and, thus, like the form we used, we think the data from Model Eight are the most useful for comparing our results.[178] The respondents to Macro's Model Eight performed significantly better than our respondents. Thus, the Macro Study respondents averaged 4.67 correct answers out of the 6 questions, while the mean number of correct responses for our respondents was 3.80.[179] To put it another way, the Macro Model Eight respondents gave accurate

168. *See infra* Q40 in Appendix A.

169. *See infra* Q42 in Appendix A.

170. SD = 1.61. *See infra* Table 3A.

171. P = 0.03; SD = 1.61. *See infra* Table 3A.

172. SD = 1.74. *See infra* Table 3B.

173. SD = 1.89. *See infra* Table 3B.

174. SD = 1.61. *See infra* Table 3B.

175. SD = 1.88. *See infra* Table 3B.

176. *See* MACRO STUDY, *supra* note 122, at ii, 1.

177. *See id.* at app. A, model 8; 12 C.F.R. § 1026 app. G-10(B) (2023).

178. Though the Macro Report included more participants overall than our study, only 122 of those participants saw Model 8, in contrast to the 659 participants in our study. *See* MACRO STUDY, *supra* note 122; *infra* Table 6; *infra* Appendix A.

179. *See infra* Table 3A.

responses 66.7% of the time on the Schumer Box questions, while our respondents collectively provided correct responses only 54.3% of the time, with Computer Readers averaging 56.4% correct answers, Smartphone Readers averaging 52.1%, and Samsung users averaging 56.8%.[180] Not only did the respondents to Macro's Schumer Box Model Eight outperform our respondents, but the Macro respondents who saw other Schumer Box models also answered more accurately than our respondents. The Macro respondents answered correctly 60.7% of the time on the Schumer Box Model on which they performed the worst.[181] In other words, Computer Readers and Samsung users did worse than the Macro respondents even when the Macro respondents were presented with forms that the Federal Reserve rejected as inadequate.[182]

3. Schumer Box Comparison Questions

The survey asked four questions to see if respondents could tell which credit card offer provided better terms.[183] These questions had no analogue in the Macro Study, but we felt it desirable to examine whether the Schumer Box served its intended purpose of facilitating comparison shopping.[184] Overall, Computer Readers performed significantly better than Smartphone Readers on these questions, averaging 3.00 correct answers, while the mean number of correct answers for Smartphone Readers was slightly lower at 2.75.[185] But as with the Schumer Box questions, the difference does not exist with Samsung users. Thus, Samsung users averaged 3.08 correct responses,[186] while Apple users averaged 2.51.[187]

180. *See infra* Table 3A. Apple users averaged 49.6% correct answers; Motorola users averaged 52.4%; and LG users averaged 49.3%. *See infra* Table 3B.

181. *See infra* Table 13.

182. The Macro respondents on Model 1 averaged 60.7% correct; on Model 2, 70.5%; on Model 3, 64.8%; on Model 4, 65.6%; on Model 5, 63.6%; on Model 6, 72.5%; and on Model 7, 65.0%. *See infra* Table 13.

183. The questions were Q51, Q53, Q55, and Q58. *See infra* Appendix A.

184. *See supra* note 129 and accompanying text.

185. *See infra* Table 1A.

186. SD = 0.87. *See infra* Table 1B.

187. SD = 1.18. LG users averaged 2.65 (SD =1.31) and Motorola users averaged 2.72 (SD = 1.18). *See infra* Table 1B.

4. Periodic Statement Questions

We asked fifteen questions about the meaning of the items on the periodic statement, though some were follow-up questions that not all respondents saw, depending on how they answered the prior questions.[188] Once again, Smartphone Readers did significantly worse than Computer Readers, with Computer Readers averaging 9.86 correct answers and Smartphone Readers only 9.05, as shown in Table 4A.[189] Computer Readers gave correct responses 61.6% of the time, while Smartphone Readers did so only 56.6% of the time.[190] As with the other components of the survey, Samsung users, with an average of 9.81, or 61.3%, correct answers,[191] were not the cause of the difference between Computer Readers and Smartphone Readers. Apple users, in contrast, averaged only 8.49, or 53.1%, accurate responses.[192]

Because Macro's Periodic Statement Model Nine is most like the periodic statement forms currently in use, [193] and thus like the form we used, we used the data from Model Nine to compare to our results.[194] Overall, the Macro respondents did not significantly outperform our combined respondents. The Macro respondents averaged 9.84 correct answers while our respondents combined averaged 9.46 correct answers.[195] However, when we compared the Macro respondents to Computer and Smartphone Readers separately, there were significant differences between the Macro and Smartphone Readers. Although the Macro and Computer Readers did not significantly differ in performance, Macro respondents significantly outscored the Smartphone Readers. The Macro participants gave accurate answers to 61.5% of the Periodic Statement questions while our Smartphone

188. The questions were Q67, Q69, Q71, Q73, Q75, Q77, Q79, Q81, Q83, Q85, Q87, Q91, Q93, Q95, and Q97. One question had two correct answers. *See infra* Appendix A.

189. *See infra* Table 4A.

190. *See infra* Table 1A.

191. SD = 3.56. *See infra* Table 4B.

192. SD = 3.93. *See infra* Table 4B. LG users averaged 9.90 correct answers (SD = 4.41), while Motorola users averaged 7.94 (SD = 4.21). *See infra* Table 4B.

193. *See* MACRO STUDY, *supra* note 122, at B, model 9; 12 C.F.R. § 1026 app. G-18(F) (2023).

194. Macro tested Model Nine on seventy-eight respondents. *See* FOIA Request: Macro Study Data (on file with author).

195. *See infra* Table 4A.

Readers did so only 56.6% of the time.[196] But when we compare only the Samsung users—who averaged 9.81, or 61.3%, correct answers—to the Macro Periodic Statement Model Nine Readers, we did not see a significant difference.[197]

B. Overall Consumer Comprehension

Our results suggest that the disclosures failed to convey loan terms to many respondents. Only seven respondents out of 659, answered all questions correctly.[198] Only twenty-six got at least 90% right.[199] Many educational grading systems give a passing grade to students who achieve at least 65% correct answers.[200] Just 298 participants, or 45.2%, performed at least that well.[201] Put another way, more than half of the respondents would have failed if graded by that common metric.

We also looked at the percentage of questions answered correctly. Recall that Model Eight was the Macro Schumer Box form most like today's disclosures, and Model Nine was the most similar to today's periodic statement disclosures.[202] When we combine the Macro respondents' answers to the questions about Macro Schumer Box Model Eight and Macro Periodic Statement Model Nine, the Macro respondents, on those questions and only those questions, scored 60.7% correct answers.[203] The difference with our respondents on the same questions, who answered 57.6% correctly, approaches statistical significance.[204] But in any event, both the Macro respondents and our respondents averaged more than one wrong answer out of every three questions about the forms.

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196. *See infra* Table 4A. Computer Readers averaged 61.6% correct answers on the periodic statement questions. *See infra* Table 4A.

197. P = 0.95. *See infra* Table 4B.

198. *See infra* Table 12.

199. *See infra* Table 12.

200. *What Grade Do You Need to Pass a College Class?*, COURSERA (June 16, 2023), [https://perma.cc/7Q2G-444P].

201. *See infra* Table 12.

202. *See supra* text accompanying notes 177-78, 193-94.

203. *See infra* Table 2. Collectively, 210 Macro respondents answered either Schumer Box Model Eight, Periodic Statement Model Nine, or both and so had some of their answers included for this analysis. *See* FOIA Request: Macro Study Data (on file with author).

204. P = 0.078. *See infra* Table 2.

1. Demographic Factors

Our survey posed a number of questions about demographic factors so that we could verify that our respondents reflected the general population of United States adults. But that also enables us to compare how different demographic groups performed on the questions.[205] Responses were not significantly different as to some characteristics. Thus, the difference between those identifying as male and those identifying as female was not significant,[206] nor did we see significant variation among the various regions.[207] Accuracy rates similarly did not vary significantly by credit limit[208] or, perhaps surprisingly, by education.[209]

But as to some different groups, we did see differences. White respondents performed significantly better than both Black/African-American and Latine respondents.[210] Performance on the Schumer Box questions did not differ significantly based on age.[211] However, as to the periodic statement questions, individuals who were older than fifty-five years averaged 62.4% correct answers, significantly better than both thirty-five to fifty-four year-olds (57.9%)[212] and twenty-five

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205. Unless otherwise noted, the matters reported in this subsection refer to the combined responses to the Schumer Box questions, the Schumer Box comparison questions, and the periodic statement questions.

206. Males answered correctly 60.5% of the time, while females did so 59.7%, P = 0.64. *See infra* Table 8A.

207. Midwestern respondents answered, on average, 60.9% of the questions correctly, while it was 59.8% in the Northeast, 59.5% in the South, and 58.8% in the West, P = 0.86. *See infra* Table 8B.

208. Between-subjects ANOVA P = 0.13. *See infra* Table 8C. Those saying they did not have a credit card averaged 60.2% correct answers; those with credit limits under $1,000 averaged 58.5%; respondents in the $1,000 to $4,000 range averaged 57.2%; those with credit limits from $4,000 to $8,000 averaged 58.6%; and respondents whose credit limits exceeded $8,000 averaged 63.1% correct answers. *See infra* Table 8C. Respondents who did not know their credit limit averaged 60.2%. *See infra* Table 8C.

209. For the Schumer Box questions, P = 0.49 and for the periodic statement, P = 0.39. *See infra* Table 9.

210. White respondents, on average, answered 62.6% of the questions correctly, while African American respondents did so 54.2% of the time (P < 0.001), and Latine respondents did so 50.2% of the time (P < 0.001). *See infra* Table 5. We had too few respondents in some groups to permit comparisons and, as for comparison among other groups, the differences were not significant.

211. P = 0.22. *See infra* Table 8E.

212. P = 0.047. *See infra* Table 8D.

to thirty-four year-olds (57.3%).[213] Different income strata also varied in their understanding of the forms.[214] Finally, those who obtained their first credit card more than ten years ago performed significantly better in answering questions than those who obtained their first card more recently, suggesting some benefit from experience with credit cards.[215]

C. Items Limited by the Credit CARD Act Compared with Items Not Limited by the Credit CARD Act

As discussed in Part I, the Credit CARD Act limited the amounts of penalty fees (e.g., late fees) issuers could charge as but did not directly limit the amounts of fees that did not impose penalties (e.g., balance transfer fees) or, for that matter, limit the amounts of penalty interest rates (e.g., an increase in interest rates because of a late payment).[216] Because we asked questions about matters both, limited and not limited by the Credit CARD Act, we were able to see which disclosures consumers understood better.[217] We combined the results of questions about penalty fees

213. P = 0.035. *See infra* Table 8D. Respondents ages eighteen to twenty-four averaged 56.0% correct responses, but comparisons were difficult with only forty-four respondents in the group. *See infra* Table 8D.

214. While those making $50,001 to $75,000 had the highest average score at 63.9% correct answers, they did not significantly outperform those making more than $100,000 (averaging 61.1% correct answers), P = 0.28. *See infra* Table 8F. Those in the $50,001 to $75,000 band did do significantly better than those who made under $25,000 (56.7%), P = 0.006, and those who made $75,001 to $100,000 (53.9%), P = 0.001. *See infra* Table 8F. Respondents with incomes in the $25,000 to $50,000 range (59.9%) did marginally, but not significantly, worse than those who make $50,001 to $75,000, P = 0.08, and significantly better than those who make $75,000 to $100,000, P = 0.028. *See infra* Table 8F. Those who made $75,001 to $100,000 also did significantly worse than those who made over $100,000, P = 0.013. *See infra* Table 8F.

215. Those who obtained a credit card more than ten years ago were significantly more accurate with 62.5% correct answers, on average, than those who obtained one five to ten years ago (54.4%; P < 0.001) and those who did not have a credit card (56.4%, P = 0.047). *See infra* Table 8G. But there were no significant differences among other groups. *See infra* Table 8G.

216. Congress did bar credit card issuers from imposing penalty rates for late payments until the consumer had failed to make the minimum payment for sixty days. *See supra* note 95 and accompanying text.

217. *See infra* Q32, Q34, Q36, Q38, Q40, Q42, Q51, Q53, Q55, Q58, Q73, Q75, Q77, Q79, Q81, Q85, Q87, Q91, Q93, Q95, Q97 in Appendix A.

in one group[218] and the results of questions about other fees and penalty rates[219] in another and compared the results. We found that respondents performed significantly better on questions asking about items as to which the Credit CARD Act limited penalty fees, averaging 73.3% correct answers, compared to 53.8% on items not limited by the Credit CARD Act.[220] Put another way, consumers were 36% more likely to understand the disclosures on matters where the Credit CARD Act protects them from unreasonable charges than with items where their only protection is their ability to understand the disclosures.

The same pattern was reflected whether respondents answered on a smartphone or a computer. Thus, Smartphone Readers averaged 67.9% correct answers when questioned about penalty fees and only 52% correct answers on penalty rates and other fees, a significant difference.[221] Similarly, Computer Readers answered questions about penalty fees correctly 78.7% of the time, as opposed to 55.6% on other items, again a significant difference.[222] As with the disclosures generally, Computer Readers were significantly more accurate than Smartphone Readers on items limited by the Credit CARD Act[223] and items not limited.[224]

D. Terms for Future Transactions and Verifying Past Transactions

The Schumer Box disclosures and some of the periodic statement disclosures notify consumers of the consequences for transactions which they might engage in: late payments, the

218. Specifically, we combined the results for Q38 (fee only), Q40, Q55, Q93 (fee only), and Q95.

219. Specifically, we combined the results for Q32, Q34, Q36, Q38 (rate only), Q42, Q51, Q53, Q58, Q67, Q69, Q71, Q73, Q75, Q77, Q83, Q85, Q87, Q93 (rate only), and Q97. For purposes of this comparison, we ignored the Credit CARD Act's rules governing fee-harvester cards. *See* 15 U.S.C. § 1637(n) (2010). We omitted Q79 and Q81 from the analysis because those questions asked about fees without distinguishing between penalty fees and non-penalty fees, and Q91 because it asked about late penalty fees and late penalty rates.

220. $P < 0.001$. *See infra* Table 1A.

221. $P < 0.001$. *See infra* Table 1A.

222. $P < 0.001$. *See infra* Table 1A.

223. $P = 0.003$. *See infra* Table 1A.

224. $P = 0.005$. *See infra* Table 1A.

annual fee, and the like.[225] However, some of the disclosures on the periodic statement report transactions that have already occurred, such as cash advances and the fees already charged.[226] The former serves TILA's purpose of enabling consumers to avoid uninformed borrowing,[227] and the latter helps consumers verify transactions, which can aid in determining if someone has stolen the consumer's identity or an error has been made. To determine how well consumers understood each type of disclosure, we placed questions that addressed future transactions[228] in one group and past transactions[229] in another. Overall, consumers answered questions about past transactions correctly 65.4% of the time and questions about future transactions correctly 57.8% of the time, a significant difference.[230] Not surprisingly, Computer Readers did significantly better than Smartphone Readers on both types of questions.[231]

V. NORMATIVE IMPLICATIONS

A. Are Disclosures via Smartphone Sufficient?

Consumers who saw the disclosures on Samsung phones understood them as well as Computer Readers.[232] We do not know why. It is possible that there is something about Samsung phones that makes reading disclosures on them as effective as reading them on a computer. But there is also another possibility. We were not in a position to randomly assign respondents to different types of smartphones. Respondents themselves chose the smartphone on which they took the survey. Presumably, they

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225. *See infra* Q36, Q38, Q40, Q42, Q91, Q93, Q95, Q97 in Appendix A.

226. *See infra* Q32, Q67, Q71, Q79, Q81 in Appendix A.

227. 15 U.S.C. § 1601(a) (1976).

228. *See infra* Q32, Q34, Q36, Q38, Q40, Q42, Q51, Q53, Q55, Q58, Q77, Q83, Q85, Q87, Q91, Q93, Q95, Q97 in Appendix A.

229. *See infra* Q67, Q69, Q71, Q73, Q75, Q79, Q81 in Appendix A.

230. $P < 0.001$. *See infra* Table 1A.

231. As to past transactions, Computer Readers averaged 68.5% correct answers, compared with 62.3% by Smartphone Readers ($P = 0.006$). *See infra* Table 1A. Computer Readers averaged 60.1% on future transactions, while Smartphone Readers scored only 55.5% ($P = 0.003$). *See infra* Table 1A.

232. *See infra* Table 1B.

used their own phones. Thus, we are not able to determine whether the explanation lies with the Samsung phones themselves or in some difference in those who choose Samsung phones that makes them better able to understand disclosures.

One possible explanation for the discrepancy between Samsung phones and Apple phones is that Samsung phones permit people to use a split-screen feature, so Samsung users may have had an easier time going back and forth between the survey questions and the disclosures than Apple users.[233] But we are skeptical about that explanation. If that were the explanation, we would expect the answers of those who used LG and Motorola phones—which also allow consumers to split the display[234]—to significantly differ from Apple users and to closely resemble the Samsung responses. Similarly, the non-Samsung Android users' performance should match that of the Samsung users. And yet neither seems to be the case.[235] We cannot conclusively rule out the possibility that the split-screen accounts for the difference, but we think it is unlikely.

We also compared the demographic characteristics of the respondents who used Apple phones to those who used Samsung phones. Perhaps, we thought, the Samsung users were better educated, or some other difference would explain the results. But no, the differences in education were not statistically significant.[236] Nor were the differences in credit limit,[237]

233. Samsung phones have offered split-screen functionality since at least 2017. *See Samsung Galaxy J3 (2017) (J327A): Multi Window*, AT&T, [https://perma.cc/Z9VE-ZVVJ] (last visited Sept. 22, 2023).

234. Motorola phones have had split screen capacity since 2016. *See* Steven Winkelman, *Here's How to Use Split-Screen Mode on Your Android Phone*, DIGITALTRENDS (Mar. 30, 2018), [https://perma.cc/K5A8-YN9T]. LG phones have had split screen ability since at least 2017. *See* Rose Behar, *How to Use Split Screen Mode on the LG G6*, MOBILESYRUP (Apr. 26, 2017, 8:56 PM), [https://perma.cc/4JE2-SLXR].

235. *See supra* text accompanying notes 161-62.

236. P = 0.95. *See infra* Table 10A.

237. P = 0.30. *See infra* Table 10A.

income,[238] time since first credit card,[239] gender,[240] or race[241] significant. We did see some differences in the ages[242] and regions[243] of the respondents, though it is not clear why that would account for the different performances. But we cannot eliminate the possibility that some demographic difference not asked about explains the varying results.

Some studies have found differences between Android users and Apple users. For example, one study found that different personality types are drawn to different phones.[244] Another study found that Android users tend to be more aware of security and privacy issues than Apple users, though that may be because Apple users can afford to be less concerned about malware because Apple maintains greater control over which applications are available to iPhone users.[245] According to a 2014 summary by Forbes:

> Android people include more hard-core techies: they work in technical jobs and are more comfortable with the more open but less polished Android user experience. And they are less affluent, so the generally lower price of Android phones appeals to them more. . . . iPhone people are a notch up the socio-economic scale: higher income, higher education, higher representation in professional and

238. P = 0.79. *See infra* Table 10A.

239. P = 0.15. *See infra* Table 10A.

240. P = 0.18. *See infra* Table 10A. This finding contrasts with phone usage in the general population; Apple users tend to be female, while Samsung users are more likely to be male. Lisa Moshfegh, *Gen Z and Millennials Prefer Apple Over Samsung*, FLURRY (Aug. 5, 2020), [https://perma.cc/YW7E-832C].

241. P = 0.16. *See infra* Table 10A.

242. P = 0.005. *See infra* Table 10A. Specifically, more Apple users were in the twenty-five to thirty-four-year-old age range—sixty—than Samsung—thirty-two. *See infra* Table 10B. And more people aged at least fifty-five used Samsung (N = 17) than Apple (N = 8). *See infra* Table 10B. This is consistent with the overall demographics for Apple and Samsung users. *See* Moshfegh, *supra* note 240.

243. P = 0.027. *See infra* Table 10A. More of our respondents from the south used Apple—sixty-five—than Samsung—thirty. *See infra* Table 10C.

244. *See generally* Heather Shaw et al., Predicting Smartphone Operating System from Personality and Individual Differences, 19 CYBERPSYCHOLOGY, BEHAV., AND SOC. NETWORKING 727 (2016).

245. *See* Lena Reinfelder et al., *Differences Between Android and iPhone Users in Their Security and Privacy Awareness*, *in* TRUST, PRIVACY, AND SECURITY IN DIGITAL BUSINESS 56, 61-62 (Claudia Eckert, Sokratis K. Katsikas & Günther Pernul, eds., 2014).

> managerial jobs. They are tech enthusiasts, but more as consumers than producers . . . .[246]

iPhones tend to appeal more to younger consumers and Androids to older consumers.[247] But again, if those demographic differences explained the different results, we would expect to see them with non-Samsung Android users, and we do not.

One thing we can say with certainty is that the smaller screen of a smartphone does not prevent consumers from understanding disclosures as well as the larger screen of a laptop or desktop. Otherwise, Samsung users would not have understood the disclosures as well as they did. We know that something prevented the users of other phones from understanding the disclosures as well, but it must not have been that they were viewing them on a smartphone screen.

While we are not able to ascertain whether the difference in results between Samsung users, on the one hand, and Apple users (and, for that matter, users of non-Samsung Androids), on the other hand, is attributable to the phones or the users, or both, our best guess, and we emphasize that it is no more than a guess, is that the difference lies in the phones. The answer to the question of whether our guess is correct will have to await further research. If our guess is wrong—if, in other words, those who used Apple phones would have performed just as poorly on a Samsung phone or computer, and those who used a Samsung or computer would have performed just as well on an Apple phone—the implication is that it makes no difference whether consumers view disclosures on a computer or one phone or another. But in the meantime, we offer some observations based on the assumption that the difference is attributable to the phones rather than those who used them.

Apple users missed nearly half of the answers on the survey, while Computer Readers were, on average, over 8% more likely than Apple users to answer questions correctly.[248] While the difference may not seem like much, it translates to more than

246. Todd Hixon, *What Kind of Person Prefers an iPhone?*, FORBES (Apr. 10, 2014, 3:30 PM), [https://perma.cc/SBF4-SXPQ].

247. Bartosz Szczygieł, *iPhone vs Android Users: Key Differences*, NETGURU (Dec. 13, 2022), [https://perma.cc/2KJZ-EJUV].

248. *See infra* Table 1B.

sixteen million more credit card disclosures that are misunderstood if seen on an iPhone, in light of the CFPB's estimate that 181 million Americans have credit cards.[249] And it provides more opportunities for predatory lenders, especially against vulnerable consumers.

A possible response is to mandate that disclosures be provided by a means other than on an iPhone, such as by computer, paper, or even on a Samsung. Indeed, as to the Schumer Box, the Macro respondents far outperformed Computer Readers, suggesting that even seeing the disclosures on a computer screen or Samsung would not be enough for the Schumer Box.[250]

Interrupting a transaction on an Apple phone so that disclosures can be provided another way is not likely to earn the approbation of either consumers or the industry. The industry already grumbles that the difficulty of completing online loan applications causes more than thirty times as many consumers to abandon online loan applications than complete them.[251] Adding

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249. *See* CFPB, 2021 CREDIT CARD MARKET, *supra* note 17, at 25 (the estimate was as of the end of 2020).

250. *See* discussion *supra* Section IV.A. We should note that while we have, as a shorthand, been implying that the only difference between our respondents and the Macro respondents was that the Macro respondents saw the disclosures on paper, in fact, other differences in the experimental design could have affected the results. While our respondents saw the questions on a screen—either that of a computer or smartphone—the Macro respondents were asked the questions by a person in the room with them. *See* MACRO STUDY, *supra* note 122, at ii, 15 n.6. It may be that the Macro respondents felt extra pressure not to appear foolish in front of someone else by answering incorrectly. Some research has found that being observed improves performance, *see* Vikram S. Chib et al., *Neural Substrates of Social Facilitation Effects on Incentive-Based Performance*, 13 SOC. COGNITIVE & AFFECTIVE NEUROSCIENCE 391, 395 (2018), while other research has found just the opposite, *see* Clément Belletier et al., *Choking Under Monitoring Pressure: Being Watched by the Experimenter Reduces Executive Attention*, 22 PSYCHONOMIC BULL. & REV. 1410, 1414 (2015). In any event, our study does not permit us to determine whether the greater accuracy of the Macro respondents owes more to the fact that they saw the disclosures on paper, that a person was present asking them the questions and recording their answers, some combination of those factors, or something else entirely. However, the fact that Computer Readers and Macro respondents did not differ significantly in their understanding of the periodic statement indicates that, in some circumstances, these differences are not material, and paper and computer disclosures can be interchangeable. *See supra* note 140 and accompanying text.

251. *See 3 Ways Online Lenders Can Increase Loan Application Conversions*, VOAPPS, [https://perma.cc/5BPY-J92A] (last visited Sept. 22, 2023) ("[O]nly 3% of all potential loan applicants actually complete an online loan application."); *Make Application Abandonment Yesterday's Problem*, EXPERIAN, [https://perma.cc/H2EC-DG9H] (last

additional steps for consumers to obtain loans is likely to further reduce the number of consumers who complete the loan application process. And consumers have a history in other contexts of objecting, sometimes vehemently, to delays caused by consumer protection requirements prior to obtention of a loan. For example, the original version of the Real Estate Settlement Procedures Act ("RESPA")[252] required that consumers be provided certain disclosures relating to their purchases of homes at least twelve days before they could close on the homes.[253] Consumers were so angry at the delays that when consumers spotted a senator at a Green Bay Packers game, they chanted "down with RESPA."[254]

But delays to avoid reading disclosures on iPhones need not be so lengthy. Given that consumers typically receive the periodic statement weeks before they must act on it,[255] consumers would have ample time to print the statement or view it on a larger screen before making a payment. Even as to the Schumer Box, presumably, many consumers have the option of printing from an Apple phone. What is less clear is whether consumers would bother to do so. Probably few consumers realize that they are less likely to understand disclosures when they see them on an iPhone. Consequently, they are not likely to see much need to print the disclosure. Even if problems with comprehending notices on an Apple phone were disclosed to consumers—perhaps on an iPhone!—it remains uncertain whether consumers would trouble themselves to print and read a disclosure that they had already

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visited Sept. 11, 2023) ("Your customers expect fast and easy experiences in all aspects of their digital lives—and their expectations around online loan and credit applications are no different. Current processes are manual and time-consuming, and they often result in abandoned forms.").

252. *See* Real Estate Settlement Procedures Act of 1974, Pub. L. No. 93-533, 88 Stat. 1724 (1974).

253. Real Estate Settlement Procedures Act of 1974, Pub. L. No. 93-533, § 6(a), 88 Stat. 1724, 1726.

254. *Oversight on the Real Estate Settlement Procedures Act of 1974: Hearings on S.2327 and S.2349 Before the S. Comm. on Banking, Hous. & Urb. Affs*, 94th Cong. 1 (1975) (statement of Sen. William Proxmire, Chairman); *see also* Robert R. Elliot, *R.E.S.P.A. Revisited (Upon You)*, 62 A.B.A.J. 1131, 1131 (1976).

255. Under 12 C.F.R. § 1026.5(b)(2)(ii)(B) (2011), periodic statements must be sent at least fourteen days before the minimum payment is due and, if a grace period applies, at least twenty-one days before the grace period expires.

seen. In other words, once consumers see a disclosure on an Apple phone, they may eschew other opportunities to view the disclosure. The result would be that the inadequacy of iPhone disclosures would not be cured by other disclosures. And something more would be needed to protect those for whom a disclosure is not enough, if there is to be consumer protection. The following subsections discuss what that protection might look like and whether lawmakers should defer to the judgment of those who feel consumers need no protection.

B. The Problem of Consumer Incomprehension of the Disclosures

1. The Level of Consumer Understanding Does Not Provide Sufficient Protection

In the view of some judges, disclosures are sufficient if they are visible or understood by those in the industry, even if consumers cannot understand them.[256] But such a view cannot be reconciled with the express purpose of TILA. TILA states that one of its purposes is "to assure a meaningful disclosure of credit terms so that the consumer will be able to . . . avoid the uninformed use of credit . . . ."[257] It does not say that its purpose is to avoid uninformed lending by the industry.[258] Disclosures that are incomprehensible or that are understood by the creditor but not the borrower do not meaningfully inform consumers. Nor do they prevent the uninformed use of credit.

Our study found that the existing credit card disclosures are not consistently meaningful to consumers. Whether they read the disclosures on a computer or smartphone, more than half of our respondents could not attain a minimum understanding of the credit card disclosures currently in use, with minimum understanding measured by getting at least 65% of the questions right.[259] Collectively, the respondents to our survey and the Macro Study failed to answer more than 40% of the questions

256. *See supra* notes 82-85 and accompanying text.
257. 15 U.S.C. § 1601(a) (1976).
258. *See generally* 15 U.S.C. § 1601.
259. *See infra* Table 1A.

correctly.[260] Unless some other protection mechanism shields consumers from predatory practices, then, many consumers cannot protect themselves against accepting credit cards with uncompetitive terms.[261]

Respondents performed particularly poorly on certain questions. For example, as indicated in Table 2, only 30% of the respondents to our survey and the Macro Study realized that the periodic statement stated that they were about to be charged a different interest rate for new purchases, and only 15% were able to identify what that interest rate would be.[262] For many borrowers, the interest rate is the most important criterion in determining whether they want to borrow from a particular lender,[263] and yet 85% of the respondents could not determine what that interest rate was about to jump to.[264] Similarly, only 51% of the combined respondents were able to identify the balance transfer fee from the Schumer Box.[265]

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260. *See infra* Table 2. As with other references to the Macro results, unless otherwise indicated, this analysis focuses only on Macro respondents who saw the Schumer Box Model Eight or the Periodic Statement Model Nine, or both.

261. Industry representatives take a different view:

> We believe that consumers can readily understand the credit card terms that are of most importance to them. In essence, consumers need to understand: (1) what their standard interest rate will be if they decide to carry a balance on the account; (2) what conduct might cause them to pay a higher interest rate or incur fees, and what those rates or fees are; and (3) certain service fees (such as annual fees or foreign exchange fees) that they may be charged. We believe that the existing disclosures serve this purpose, and that customers use these disclosures effectively when they compare issuers and use their cards.

Improving Credit Card Consumer Protection: Recent Industry and Regulatory Initiatives: Hearing Before the Subcomm. on Fin. Insts. and Consumer Credit of the H. Comm. on Fin. Servs., 110th Cong. 125 (2007) (statement of Bill Caywood, Consumer Operational Risk and Compliance Officer, Bank of America).

262. *See infra* Table 2; *infra* Q85, Q87 in Appendix A. The figures in the text concerning the Macro Study are only for those who saw Schumer Box Model Eight and Periodic Statement Model Nine.

263. *See* Thomas A. Durkin, *Consumers and Credit Disclosures: Credit Cards and Credit Insurance*, 88 FED. RES. BULL. 201, 203 (2002); Thomas A. Durkin et al., *An Assessment of Behavioral Law and Economics Contentions and What We Know Empirically About Credit Card Use by Consumers*, 22 SUP. CT. ECON. REV. 1, 22-25 (2015) (finding that consumers who do not pay off their balances every month are sensitive to credit card interest rates).

264. *See infra* Q87 in Appendix A; *infra* Table 2.

265. *See infra* Q36 in Appendix A; *infra* Table 2.

And the comprehension issues might be even worse in a real-world transaction. Recall that, in contrast to the Macro Study, we omitted extraneous material from what we provided to our respondents, such as promotional materials or disclosures required under state law.[266] In an actual transaction, consumers might have a harder time pulling the key items from a mass of information,[267] and behavioral biases might incentivize consumers to misunderstand disclosures.[268] Accordingly, consumers might do even less well in genuine transactions.

In short, despite improvements in consumer disclosure as a result of consumer testing, our study tends to confirm that Alan White and Cathy Lesser Mansfield's words written some twenty years ago remain true today: "[E]ven consumers who might take the time and trouble to 'read' contemporary consumer contract documents are unlikely to understand them. . . . [L]iteracy research suggests that many, if not most, consumers are unable to extract critical information on contract terms from federally mandated disclosure documents."[269] Perhaps Richard F. Syron, then the president and CEO of Freddie Mac and a former president of the Federal Reserve Bank of Boston—at that time the agency charged with interpreting and implementing TILA—best illustrated this as to credit card statements when he testified that he and his wife had spent an hour "trying to understand a

266. *See supra* text accompanying notes 136-40.

267. For examples of how businesses use contract language to confuse consumers, *see* Shmuel I. Becher & Uri Benoliel, *Dark Contracts*, 64 B.C. L. REV. 55 (2023).

268. *See* Shmuel I. Becher et al., *Poor Consumer(s) Law: The Case of High-Cost Credit and Payday Loans*, *in* LEGAL APPLICATIONS OF MARKETING THEORY 12-13 (Jacob Gersen & Joel Steckel eds.) (forthcoming 2023) [hereinafter *Poor Consumers*] ("[C]onfirmation bias causes people to look for and overvalue information that supports their existing beliefs or desires . . . . [C]onsumers do not expect disclosure materials to further denote that the transaction they are about to enter is a favorable one. This may trigger 'active information avoidance' . . . .").

269. Alan M. White & Cathy Lesser Mansfield, *Literacy and Contract*, 13 STAN. L. & POL'Y REV. 233, 234 (2002); *see also* Shmuel I. Becher & Uri Benoliel, *The Duty to Read the Unreadable*, 60 B.C. L. Rev. 2255, 2277 (2019) [hereinafter *Duty to Read*] ("The results of this study indicate that consumer sign-in-wrap contracts are generally unreadable."); Ralph J. Rohner, *Whither Truth in Lending?*, 50 CONSUMER FIN. L. Q. REP. 114, 114 (1996) ("There is no TILA elixir to cure consumer illiteracy, 'innumeracy,' or plain disinterest."); THOMAS A. DURKIN & GREGORY ELLIEHAUSEN, TRUTH IN LENDING: THEORY, HISTORY, AND A WAY FORWARD 195 (2011) ("TILA is unable to make up for failures of consumers to understand . . . . [I]t is not possible to legislate comprehension of anything.").

statement a credit card company had sent [them], and [they] still [could not] figure out which card it applie[d] to."[270]

All this raises a question: how much comprehension is needed before we can say that consumers are adequately protected? While in a perfect world, every consumer would understand every disclosure, that is surely too much to demand.[271] Opinions about how much *is* enough will surely vary, but it might be instructive to examine the levels of comprehension demanded under the Federal Trade Commission Act, which bars deceptive advertisements.[272] By that standard, the level of understanding found in our survey and Macro's would be considered inadequate. For example, in one case, a court wrote, "We find it hard to overturn the deception findings of the Commission if the ad thus misled 15% (or 10%) of the buying public."[273] Other cases have also found it deceptive when as few as 14% of consumers were misled,[274] or even 9%.[275] If the government holds advertisers to such a standard, it becomes difficult to argue that it should not hold its own disclosures to a similar standard—but those deception standards could be doubled, and the credit card disclosures would still fail.[276] Similarly, the Federal Trade

270. *Possible Responses to Rising Mortgage Foreclosures: Hearing Before the H. Comm. on Fin. Servs.*, 110th Cong. 35 (2007) (statement of Richard F. Syron, Chairman and CEO, Freddie Mac). In 2007, the Federal Reserve had not yet modified the credit card disclosures in light of the Macro Report, but in many respects statements at that time resembled their present-day counterparts. *See generally* MACRO STUDY, *supra* note 122.

271. *Cf.* JACOB JACOBY ET AL., MISCOMPREHENSION OF TELEVISED COMMUNICATIONS 67 (1980) ("Generalizing from these data suggests that one might expect anywhere from one-quarter to one-third of the material information content contained in communications that are broadcast over commercial television to be miscomprehended.").

272. *See* 15 U.S.C. § 45(a)(1) (2006) (declaring unlawful "deceptive acts or practices").

273. *See* Firestone Tire & Rubber Co. v. FTC, 481 F.2d 246, 249 (6th Cir. 1973).

274. *See In re* Benrus Watch Co., 64 F.T.C. 1018, 1045 (1964), *aff'd*, 352 F.2d 313 (8th Cir. 1965), *cert. denied*, 384 U.S. 939 (1966) (assuming only 14% of consumers were misled, "these are entitled to protection").

275. *See In re* Rhodes Pharmacal Co., 49 F.T.C. 263, 283 (1952), *aff'd in part, modified in part*, 208 F.2d 382 (7th Cir. 1953), *aff'd per curiam*, 348 U.S. 940 (1955) ("[Nine percent] would constitute a sufficient showing of the deceptive nature of respondents' advertisements.").

276. On the other hand, others have suggested that some level of miscomprehension is inevitable and that only when miscomprehension exceeds that base level should ads be seen as deceptive. *See* Ivan L. Preston & Jef I. Richards, *Consumer Miscomprehension as a Challenge to FTC Prosecutions of Deceptive Advertising*, 19 J. MARSHALL L. REV. 605, 608-09 (1986) ("With people typically erring in an average of thirty percent of instances,

Commission recently took the position in its endorsement guides that the clear and conspicuous standard requires that disclosures be "easily understandable by ordinary consumers."[277] It is hard to argue that disclosures meet that standard when more than 40% of the survey answers were wrong.

Another troublesome aspect of our findings involves who is more likely not to grasp the disclosures. White respondents, on average, provided 12% more accurate answers than Latine respondents and 8% more than Black/African-American respondents.[278] As seen in Table 5, on average, White respondents answered 16.90 questions correctly, Latine respondents averaged 13.55 correct responses, and Black/African-American respondents averaged 14.62 correct responses.[279] Similar differences also appeared in the responses to the Schumer Box questions, which are especially relevant to the initial decision consumers make when they apply for a particular credit card,[280] suggesting that predatory lenders might more profitably target their offerings to different groups based on race and ethnicity. Such targeting has been dubbed "reverse redlining," a scheme in which groups are discriminated against when businesses make offers on worse terms than those made available to others.[281] In other words, to the extent that we rely on disclosure to protect consumers, we provide less protection to

deceptiveness should properly be attributed only to messages for which the observed miscomprehension figure is higher than thirty percent."). Our levels of misunderstanding exceeded 30%. *See infra* Table 1A.

277. *See* 16 C.F.R. § 255.0(f) (2023).

278. *See supra* note 210 and accompanying text.

279. *See infra* Table 5.

280. White respondents, with an average of 57.1% correct answers, performed significantly better on the Schumer Box questions than African American respondents (average of 48.7% correct answers; $P = 0.004$) and Latine respondents (44.0% correct answers; $P < 0.001$). *See infra* Table 11A. White respondents (57.4%) also significantly outperformed African American respondents (48.1%; $P < 0.001$) and Latine respondents (44.8%; $P < 0.001$) on the periodic statement questions. *See infra* Table 11B. We did not, however, see a significant difference among the groups on the Schumer Box comparison questions, perhaps because we asked only four such questions and had relatively small samples of African American respondents ($N = 85$) and Latine respondents ($N = 65$). *See infra* Table 11C. As to those questions, African American respondents averaged 67.9% correct answers, Latine respondents averaged 69.6%, and White respondents averaged 72.7%. *See infra* Table 11C.

281. *See* Mathews v. New Century Mortg. Corp., 185 F.Supp.2d 874, 886 (S.D. Ohio 2002).

some people of color than to White consumers. And yet, some evidence suggests that people of color or particular ethnicities are sometimes treated worse by credit card lenders than White borrowers,[282] suggesting that providing less protection is a special problem.[283]

Some might greet all this news with a big "so what? Consumers largely ignore disclosures anyway, so why should we care if they cannot understand them?"[284] Even conservatives acknowledge that consumers disregard disclosures.[285] But there is a difference between consumers choosing not to take advantage of disclosures by deciding not to read them—effectively rejecting that form of consumer protection—and consumers who may wish to benefit from consumer protections and being unable to do so because they cannot understand them or worse, think they can

282. For an example of this, *see* Complaint, United States v. Assocs. Nat'l Bank, No. 1:99-cv-00196-SLR (D. Del. Mar. 29, 1999), [https://perma.cc/Q6HX-5JRB], where the government charged that the credit card issuer used lower credit-score cutoffs and higher credit-limit amounts for English-language applicants than Spanish-language applicants. Consequently, the complaint alleges that "some Spanish-language applicants were denied credit cards while similarly situated English-language applicants received credit cards. Further, some Spanish-language applicants were granted lower credit line assignments than similarly situated English-language applicants received." *Id.* at 2. The case settled with the credit card issuer agreeing to provide $1.5 million in compensation to Latine credit card applicants. Settlement Agreement at 2, United States v. Assocs. Nat'l Bank, No. 1:99-cv-00196-SLR (D. Del. Jan. 8, 2001), [https://perma.cc/ZP7U-CTQJ]. The issuer attributed the different treatment to "an inadvertent computer programming error" and denied having violated the federal Equal Credit Opportunity Act, the statute under which the government proceeded. *Id.* at 1; *see also In re* Synchrony Bank, CFPB No. 2014-CFPB-0007 (June 19, 2004), [https://perma.cc/L8SA-85CD]. *See, e.g.*, Andrea Freeman, *Racism in the Credit Card Industry*, 95 N.C. L. REV. 1071 (2017).

283. For other recent evidence of racial discrimination in consumer transactions, *see* Meirav Furth-Matzkin, *Racial Discrimination by Retailers: A Field Study of Willingness to Accept Returns* 27-28 (February 2023) (unpublished manuscript), [https://perma.cc/2J35-JHZ6] (finding "that significant racial disparities exist in the enforcement of certain consumer contracts").

284. *See* GAO REPORT, *supra* note 110, at 51 ("More than half (54 percent) of the 112 cardholders we interviewed indicated they read the disclosures provided with a new card either not very closely or not at all."); CFPB, 2017 CREDIT CARD MARKET, *supra* note 25, at 173 ("[F]or a significant and growing portion of accounts, the account holder does not see account statements at all.").

285. *See* CFPB TASKFORCE, *supra* note 28, at 311 ("It seems safe to say that . . . no one chooses a credit card based on carefully weighing the 31 items that must be disclosed."). As a result of litigation, the Taskforce Report acknowledges the Taskforce was created in violation of the Federal Advisory Committee Act's requirement that its membership be "fairly balanced." *See* 5 U.S.C. app. 2 § 5(b)(2), (c) (repealed December 2022). *See* CFPB TASKFORCE, *supra* note 28, at i.

understand them and make poor choices because they are mistaken. In one case, consumers make a choice; in the other, they have no choice. While it is likely that many, perhaps most, consumers, decide not to avail themselves of the Schumer Box and the periodic statement, it is also possible that many do wish to understand the information they provide—but our study suggests that many cannot do so.[286]

In addition, we do not actually know that consumers disregard the Schumer Box. True, most ignore *contract terms*, such as a website's terms of service and lengthy fine print,[287] but the one-page Schumer Box, for example, is neither lengthy nor printed in fine print. Considerable evidence indicates that consumers disregard other mandated disclosures,[288] but we do not know specifically how many consumers ignore the Schumer Box. Indeed, some evidence indicates that some consumers affirmatively want to know the amounts of their credit card fees.[289] Cass R. Sunstein surveyed four hundred Americans using the Amazon Mechanical Turk and found that 56% of them wanted to know "[a]ll of the terms and conditions, including possible late fees, associated with [their] credit card."[290] Those who wanted the information were even willing to pay for it.[291] The mean price they said they would pay was $60, while the median was $1.[292] Similarly, 63% of Sunstein's respondents were willing to pay to learn the standard late fee for their credit card, with a mean willingness to pay of $103—a multiple of the amount specified in the CFPB's credit card late fee safe harbor—and a median willingness to pay of $8.[293] A similar survey of thousands of

286. *Cf.* CFPB TASKFORCE, *supra* note 28, at 322 ("[C]onsumers need to understand the basic terms of the transaction before it is consummated.").

287. *See,* e.g.,Yannis Bakos et al., *Does Anyone Read the Fine Print? Consumer Attention to Standard-Form Contracts*, 43 J. LEG. STUD. 1, 2 (2014).

288. *See* CFPB TASKFORCE, *supra* note 28, at 311.

289. *See* CASS R. SUNSTEIN, TOO MUCH INFORMATION: UNDERSTANDING WHAT YOU DON'T WANT TO KNOW 33-34, 36 (2020).

290. *Id.* at 26, 33-34.

291. Fortunately, credit card issuers are obliged to provide the information to their customers without charge. In addition, credit card contracts are available online. *See* discussion *supra* Part I; *Credit Card Agreement Database*, CFPB, [https://perma.cc/2RXW-RZLH] (last visited Sept. 25, 2023).

292. SUNSTEIN, *supra* note 289, at 34.

293. *Id.* at 36.

consumers in eleven countries found that about 40% wanted to know the standard late fee for their credit cards.[294] Still another survey reported that more than three-quarters of the respondents considered the amounts of the annual fee and annual percentage rate ("APR") very important.[295] To be sure, this evidence is not dispositive. As Sunstein notes, "[W]e should not take people's answers as authoritative."[296] It has long been a truism that when answering surveys, people sometimes do not accurately report what they will do when presented with the same issue in their day-to-day lives.[297] Still, the surveys indicate that the ability to decipher at least some credit card terms has value to some consumers.

Additional support for the claim that some consumers attempt to understand disclosures comes from evidence that, as one paper puts it "most consumers [choose] the optimal credit [card] contract" for themselves when given the choice of a card that offered an annual fee but a lower interest rate and a card that offered a higher interest rate but no annual fee.[298] The implication is that consumers have used the mandated disclosures to determine which credit card represented the better choice, though it is also conceivable that they arrived at that conclusion in other ways. But "most consumers" are not all consumers; about 40% of the consumers initially made suboptimal decisions.[299] These consumers may have chosen poorly because they could not

294. *See* Lucia A. Reisch et al., *What Do People Want to Know? Information and Food Policy Implications*, 102 FOOD POL'Y 7 fig.1 (2021).

295. *See* Durkin, *supra* note 263, at 203. The survey also asked consumers what information they considered important in obtaining a new credit card. *Id.* Those who already had bank credit cards identified rates/finance charges (67%); the annual membership fee (27%); and the late penalty fee (9%), among other items. *Id.* at A116 (finding that, in credit card solicitations, more than two-thirds found mention of interest rate or APR helpful, and more than a third found mention of fees helpful).

296. SUNSTEIN, *supra* note 289, at 35.

297. *See* Richard T. LaPiere, *Attitudes vs. Actions*, 13 SOC. FORCES 230, 233-34 (1934) (finding that 91.6% of 128 surveyed auto camps, tourist camps, restaurants, and hotels said they would not accept people of Chinese ethnicity as customers, but only one of 251 hotels, auto camps, tourist camps, and restaurants (which included the surveyed facilities) actually refused to accommodate a Chinese guest who visited the establishment); *see generally* Howard Schuman, *Attitudes vs. Actions Versus Attitudes vs. Attitudes*, 36 PUB. OP. Q. 347, 349-50 (1972) (noting inconsistencies between survey responses and real-life behavior).

298. *See* Sumit Agarwal et al., *Do Consumers Choose the Right Credit Contracts?*, 4 REV. CORP. FIN. STUD. 239, 255 (2015).

299. *Id.* at 242.

decipher the disclosures, disregarded them, or simply made poor decisions. To the extent that the bad decision-making was based on an inability to understand the disclosures, TILA failed these consumers and, if they are to be protected, something else is required.

It may also be that some consumers disdain disclosures because they have learned that they cannot understand them.[300] Indeed, some evidence suggests that credit card issuers deliberately made credit card terms difficult to understand so that consumers would be tricked into obtaining their credit cards.[301] If consumers cannot comprehend the disclosures, why would they waste their time trying to read them?

At the end of the day, whether consumers choose not to read credit card disclosures or try to read them but cannot make sense of them, the conclusion is the same: disclosure is an inadequate consumer protection.[302] A 2018 Consumer Reports survey of 2,057 American adults found that 36% of the respondents reported experiencing hidden credit card fees.[303] Because credit card fees are disclosed in advance, the fact that more than one consumer in three either overlooked or did not understand those

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300. *See* BEN-SHAHAR & SCHNEIDER, *supra* note 60, at 76-77 ("Most (all?) disclosees have tried and failed to understand disclosures. So disclosees learn that reading disclosures may mean wasted time, and the disclosee who tries to read a complex disclosure soon relearns the lesson.").

301. For example, in an interview in a documentary, the former CEO of Provident, a credit card issuer, Shailesh Mehta, explained that "the pricing was designed that it [would] require a degree of some sort to understand how many different ways I'm paying and what I'm paying. . . . [N]obody knows what the real cost is." *See* Lowell Bergman & Oriana Zill de Granados, *The Card Game*, PBS FRONTLINE (Nov. 24, 2009), [https://perma.cc/6JBG-9V47].

302. Some readers may wonder whether the informed minority theory would resolve the problem. That theory, as modified to suit the situation described in this Article, would argue that as long as businesses cannot distinguish between those who can understand disclosures and those who cannot, they will offer favorable terms to all consumers in an attempt to attract the patronage of those who can comprehend disclosures. *See* Alan Schwartz & Louis L. Wilde, *Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis*, 127 U. PA. L. REV. 630, 638 (1979). One problem with the application of the theory to credit card disclosures is that issuers receive individualized reports on credit card applicants and may be able to identify those likely to struggle with credit card disclosures. For criticisms of the theory, *see* Jeff Sovern, *Toward a New Model of Consumer Protection: The Problem of Inflated Transaction Costs*, 47 WM. & MARY L. REV. 1635, 1689-89 (2006).

303. *See* Penelope Wang, *Protect Yourself from Hidden Fees*, CONSUMER REPS. (May 29, 2019), [https://perma.cc/94WB-LQD5].

disclosures, or both, demonstrates that something more than disclosure is needed to protect consumers.[304]

2. Solutions to Inadequate Protection from Disclosures

One solution may be to improve the disclosures so that consumers can understand them more easily.[305] But it seems improbable that they can be substantially improved, especially in light of the complexity of credit cards.[306] The Macro Study, after all, tested a variety of different forms of disclosures, and the Federal Reserve, followed by the CFPB, responded by basing the current forms on the forms Macro found most effective.[307] It is conceivable that additional testing could yield disclosures that are still more effective, but drilling in an already depleted well is unlikely to produce a gusher.[308] No less an authority than Ben S. Bernanke, who presided over TILA as the Federal Reserve's chair, has acknowledged that "not even the best disclosures are always adequate."[309]

Still, the CFPB, if not Congress, should explore two additional avenues. One is for the CFPB to change the way in

304. For more on whether or why it matters that contracts are understandable, *see* Benoliel & Becher, *Duty to Read*, *supra* note 269, at 2288-89; Wang, *supra* note 303.

305. *See* FED. TRADE COMM'N, .COM DISCLOSURES: HOW TO MAKE EFFECTIVE DISCLOSURES IN DIGITAL ADVERTISING 7 (2013), [https://perma.cc/BJE4-BWEA] ("If there are indications that a significant proportion of reasonable consumers are not noticing or comprehending a necessary disclosure, the disclosure should be improved.").

306. *See* OREN BAR-GILL, *supra* note 2, at 52 ("The common credit card contract is highly complex. The fees and interest rates are staggering in both number and complexity.").

307. *See Summary of Findings: Design and Testing of Truth in Lending Disclosures for Closed-End Mortgages* 9, ICF Macro (July 16, 2009), [https://perma.cc/7P7E-9PR9]; Integrated Mortgage Disclosures Under the Real Estate Settlement Procedures Act (Regulation X) and the Truth in Lending Act (Regulation Z), 78 Fed. Reg. 79730, 79866 (Dec. 31, 2013) (codified at 12 C.F.R. pts. 1024, 1026).

308. Even if the disclosures can be simplified, it might not make any difference. *See* Adam Chilton & Omri Ben-Shahar, *Simplification of Privacy Disclosures: An Experimental Test*, 45 J. LEGAL STUD. S41, S65-66 (2016) ("[W]e found that that [sic] the simplification of [privacy] disclosures did not change people's understanding of them or their ensuing behavior in any meaningful direction.").

309. *See* Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Rsrv. Sys., Speech at the Federal Reserve System's Sixth Biennial Community Affairs Research Conference: Financial Innovation and Consumer Protection (Apr. 17, 2009), [https://perma.cc/CR2A-8VYM] ("[S]ome aspects of increasingly complex products simply cannot be adequately understood or evaluated by most consumers, no matter how clear the disclosure.").

which it tests the efficacy of disclosures.[310] The Bureau tests its model forms much the way Macro and we did in our respective studies: by showing the disclosures to more or less randomly-selected consumers and asking questions to determine how well the consumers understood them.[311] But such studies, including ours, suffer from a defect: because the consumers did not actually view the disclosures in the real-life situations in which they would use them, it is not clear that the testing tells us how and whether consumers will use them.[312] We would learn much more about consumer use of credit card disclosures by observing how consumers seeking credit cards use the disclosures instead of by showing them to consumers who might have no interest in credit cards. Because consumers now obtain credit cards through online transactions,[313] the Bureau can purchase data generated by actual consumers that would indicate how much time the consumers spent with the disclosure forms open, what they clicked on—perhaps to obtain more information—and the like.[314] If the CFPB were to use the authority Congress has granted it to work with financial institutions to test different forms of disclosures, it would learn still more about how to design disclosures that consumers will actually use and understand.[315]

310. Before the CFPB adopts model forms, it must validate them through consumer testing. 12 U.S.C. § 5532(b)(3) (2010).

311. *See Quantitative Survey Testing of Model Disclosure Clauses and Form for Debt Collection: Methodology Report* 3, 7, ICF (Jan. 21, 2020), [https://perma.cc/CDN3-YQ68].

312. For example, because our respondents, like the Macro respondents, were not answering questions about credit card offers they were actually considering, their incentives to understand the disclosures differed from what they would have been for a genuine offer, and their comprehension might have differed. *See supra* note 297 and accompanying text.

313. *See* CFPB, 2021 CREDIT CARD MARKET, *supra* note 17, at 63, 66.

314. This would not be the first time the Bureau had purchased data. *See* CONSUMER FIN. PROT. BUREAU, SOURCES AND USES OF DATA AT THE BUREAU OF CONSUMER FINANCIAL PROTECTION 24 (2018), [https://perma.cc/4KY7-CBGC] (indicating that the CFPB had bought data from vendors at least thirty-one times); *see generally* E-mail from Jonathan D. Glater, Professor of L. & Fac. Dir., Ctr. for Consumer L. & Econ. Just. Sch. of L., Univ. of Cal. Berkeley, to Rohit Chopra, Dir., Consumer Fin. Prot. Bureau (Feb. 17, 2022), [https://perma.cc/J9HN-GCG3].

315. *See* 12 U.S.C. § 5532(e)(1) (2010) (authorizing the CFPB to permit covered persons to conduct trial programs "for the purpose of providing trial disclosures to consumers that are designed to improve upon any model form[s]"). For example, the CFPB could include questions in the test design and could design the disclosures in such a way as to ascertain just how much time consumers spent on each item disclosed, in addition to asking questions about the disclosures.

Second, the Bureau should test whether obliging credit card issuers to provide some credit card disclosures orally, as well as in writing, facilitates understanding.[316] Some evidence suggests that consumers, in another context, are more likely to take advantage of information provided both orally and in writing than information that is provided only in writing.[317] It makes intuitive sense that some consumers would have an easier time understanding information provided both orally and in writing than if it had been provided only in writing.

In the conceivable event that these measures and others fail to increase understanding of the disclosures to an acceptable level, lawmakers should recognize that if we are to protect the many consumers who cannot understand the disclosures, something other than disclosure is necessary.[318] Fortunately, lawmakers have already found two ways to do just that. One is usury limits. Instead of preempting state usury limits as to credit cards, Congress should enact a nationwide usury limit. Both scholars[319] and consumer advocates[320] have called for just such an approach.[321]

Alternatively, Congress could overturn the exportation doctrine that allows credit card issuers to use the usury laws of the states where they are based, rather than the states in which their customers live. That would enable the states in which

316. *See* 12 C.F.R. § 1026.60(d)(1) (2023).

317. *See* Jeff Sovern, *Written Notice of Cooling-Off Periods: A Forty-Year Natural Experiment in Illusory Consumer Protection and the Relative Effectiveness of Oral and Written Disclosures*, 75 U. PITT. L. REV. 333, 357, 367-68 (2014).

318. Other alternatives to disclosure include mandated credit counseling, *see* Sovern, *TILA*, *supra* note 62, at 830-31, and the nudges and other interventions suggested in *Poor Consumers*, *supra* note 268, at 22, 26-27.

319. *See* Kantwill & Peterson, *supra* note 5, at 542 (proposing amendment to TILA to enact a thirty-six percent usury limit); Oren Bar-Gill, *Seduction by Plastic*, 98 NW. U. L. REV. 1373, 1423 (2004) [hereinafter *Seduction by Plastic*] (calling for usury limits on credit cards only).

320. *See Protecting Americans from Debt Traps by Extending the Military's 36% Interest Rate Cap to Everyone: Hearing Before the S. Comm. on Banking, Hous. & Urb. Affs.*, 116th Cong. 13 (2021) [hereinafter *Protecting Americans from Debt Traps*] (statement of Ashley C. Harrington, Federal Advocacy Director and Senior Policy Counsel, Center for Responsible Lending).

321. The CFPB itself lacks the ability to impose a usury limit. *See* 12 U.S.C. § 5517(o) (2014).

consumers reside to determine what usury limit should apply to their citizens.

Usury laws have long had their detractors.[322] These critics argue that usury limits reduce the availability of credit, especially by preventing lenders from charging riskier borrowers higher rates that fully incorporate the greater risk of nonpayment that the lender takes with such borrowers.[323] Studies support these claims in some contexts.[324] However, recent evidence suggests that these claims may be overstated.[325] The federal Military Lending Act, as interpreted by the Department of Defense, imposes a 36% interest rate cap, among other restrictions, on certain loans to members of the military and their families, including credit card loans.[326] According to observers, the financial services industry's predictions of dire consequences from this limit have largely proved inaccurate,[327] and service members have continued to

322. *See, e.g.*, NAT'L COMM'N ON CONSUMER FIN., *supra* note 3, at 91 (quoting Nobel laureate Dr. Milton Friedman, quoting Jeremy Bentham in turn) ("[Usury] laws preclude 'many people, altogether, from getting the money they stand in need of, to answer their respective exigencies.'").

323. *See id.*; CFPB TASKFORCE, *supra* note 28, at 92 ("[S]tates should reconsider, review, and update or eliminate usury laws that are antiquated and outdated; recognizing the high costs they impose by denying valuable services to consumers who need them."); Shmuel I. Becher, *Unintended Consequences and the Design of Consumer Protection Legislation*, 93 TUL. L. REV. 105, 114-15 (2018); Mehrsa Baradaran, *Credit, Morality, and the Small-Dollar Loan*, 55 HARV. C.R.-C.L. L. REV. 63, 66 (2020).

324. *See, e.g.*, Steven M. Crafton, *An Empirical Test of the Effect of Usury Laws*, 23 J.L. & ECON. 135, 135 (1980); James McNulty, *A Reexamination of the Problem of State Usury Ceilings: The Impact in the Mortgage Market*, 20 Q. REV. ECON. & BUS. 16, 26 (1980).

325. *See* Oren Rigbi, *The Effects of Usury Laws: Evidence from the Online Loan Market*, 95 REV. ECON. & STAT. 1238, 1247 (2013). One issue that may arise with flat usury restrictions, such as the 36% percent ceiling, is that when inflation rises, the usury law limits the effective interest rates that lenders can charge. *See* Norman N. Bowsher, *Usury Laws: Harmful When Effective*, FED. RES. BANK OF ST. LOUIS, Aug. 1974, at 16, 23. A solution to that is to index usury limits to inflation rates so that when inflation rises, the usury cap may increase accordingly.

326. 10 U.S.C. § 987(b), (e) (2016); 32 C.F.R. § 232.4(b) (2023).

327. *See* Kantwill & Peterson, *supra* note 5, at 531 ("Despite much hand-wringing and prognostication that an expansion of the scope of the MLA's usury limit would both cripple the financial industry and restrict greatly access to credit for covered borrowers, neither proved to be true and many of the problems predicted for service members never came to fruition."); *Protecting Americans from Debt Traps*, *supra* note 320, at 12-13 (statement of Hollister K. Petraeus, Former Assistant Director for Servicemember Affairs, Consumer Financial Protection Bureau).

have access to credit.[328] Indeed, it appears that soldiers have been able to continue obtaining even payday loans despite the 36% limit.[329] Perhaps all this explains why at least one lender supports extending a 36% usury cap to civilians,[330] though many lenders oppose the notion.[331] On the other hand, a recent study found that an Illinois 36% interest rate cap did limit access to credit,[332] though the study has also been criticized.[333]

While usury limits would protect consumers against truly excessive loan prices, they will not ensure that consumers avoid supra-competitive prices that stay below the usury ceilings. One way to accomplish that goal is to expand the limits imposed by the Credit CARD Act on penalty fees to more fees and penalty interest rates.[334] We discuss this more fully in Section V.C below.[335]

Ironically, one argument likely to be voiced against these steps is that consumers are already the beneficiaries of disclosures. Because disclosures protect consumers, this argument goes, no other protection is needed. A downside of disclosure is that it enables the industry to engage in this sort of legal jujitsu, in which existing but inadequate protections are summoned to the aid of those opposing more beneficial protections.[336] The problem with this argument is that, to the

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328. U.S. DEP'T OF DEF., REPORT ON THE MILITARY LENDING ACT AND THE EFFECTS OF HIGH INTEREST RATES ON READINESS 9 (June 30, 2021), [https://perma.cc/Q22N-ZD4G] ("The Department believes the MLA is currently working as intended and that Service members continue to have ample access to necessary credit.").

329. *See* Susan Payne Carter & William Skimmyhorn, *Much Ado About Nothing? New Evidence on the Effects of Payday Lending on Military Members*, 99 REV. ECON. & STAT. 606, 606 (2017).

330. *See Protecting Americans from Debt Traps*, *supra* note 320, at 15 (statement of Richard Williams, President & CEO, Essential Federal Credit Union).

331. *See id.* at 17.

332. *See* J. Brandon Bolen et al., *Credit for Me but Not for Thee: The Effects of the Illinois Rate Cap*, PUB. CHOICE, June 29, 2023, at 1.

333. *See* Adam Levitin, *Impact of the Illinois Predatory Loan Prevention Act*, CREDIT SLIPS (Jan. 15, 2023, 9:30 PM), [https://perma.cc/538E-8YPG].

334. *See* discussion *supra* Section I.D.

335. *See* discussion *infra* Section V.C.

336. *See*, *e.g.*, Letter from Mickey Marshall, Dir., Regul. Legal Affs., Indep. Cmty. Bankers of Am., to Rohit Chopra, Dir., Consumer Fin. Prot. Bureau (Apr. 11, 2022) [https://perma.cc/GPZ6-P54U] (opposing regulation to curb credit card fees in part because fees are "disclosed in a transparent way that is easily understood" under TILA); Letter from Bill Hulse, Vice President, Ctr. for Cap. Mkts. Competitiveness, U.S. Chamber of Com., to

substantial extent that disclosures leave many consumers unprotected, their existence may actually weaken the consumer protections available to those whom disclosure leaves behind by blocking other legal interventions that would be more helpful to them.[337]

C. Disclosures as to Items Limited by the Credit CARD Act, and Those Not So Limited

As reported in Section IV.C, we found that consumers understood penalty fee disclosures significantly better than other items we asked about.[338] And as explained in Section I.D, TILA, as amended by the Credit CARD Act, limits the amount that credit card issuers can charge in penalty fees.[339] Putting these two items together yields the conclusion that consumers are doubly protected as to penalty fees—because the fees are limited by law and consumers have a better understanding of the disclosures—but far less well protected as to other fees and penalty rates—the amounts of which are not limited by law and consumers are less able to understand. This result seems anomalous.

To be clear, we are not advocating for eliminating the limits on penalty fees. Only 59% of our respondents were able to correctly identify the over-the-limit fee,[340] meaning that eliminating the regulation of over-the-limit fees would abrogate the only protection the other 41% of consumers receive and expose them to the possibility of being charged fees that are not "reasonable and proportional."[341] Rather, our data lead us to believe that at least some other fees, such as cash advance fees, as well as penalty interest rates, should be subject to similar limits. In other words, these items too should be limited to what is "reasonable and proportional," and the CFPB should be

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Consumer Fin. Prot. Bureau (Apr. 4, 2022) [https://perma.cc/3DWY-QPFW] (opposing additional regulation of fees in part because TILA requires extensive disclosures).

337. *Cf.* BEN-SHAHAR & SCHNEIDER, *supra* note 60, at 171-72 (describing how lenders use TILA disclosures to argue against fraud suits and how prohibitions of misconduct would better protect consumers).

338. *See* discussion *supra* Section IV.C.

339. *See* discussion *supra* Section I.D.

340. *See infra* Q40 in Appendix A; *infra* Table 1A.

341. *See* 15 U.S.C. § 1665d (2010).

empowered to create a presumptive safe harbor for what meets that standard.[342]

Our reasoning for saying so is as follows: classical economics teaches that, to the extent that consumers can understand pricing and markets are competitive, regulatory limits to charges are unnecessary because consumers will naturally choose lower prices, all other things being equal.[343] But when consumers cannot understand how a price is quoted or face other impediments in determining prices, they cannot select the lowest price, and merchants are free to charge supra-competitive prices. Our data demonstrate that many consumers cannot understand how prices are quoted for certain credit card fees and penalty interest rates, and thus depending on disclosure alone will leave them unprotected and in a suboptimal market equilibrium.[344] Congress has already made a similar determination as to penalty *fees*, so it is hardly much of a leap to make the same determination as to penalty *rates* or other fees as to which consumers suffer worse comprehension issues.[345] Because the same event, such as making late payments, triggers both penalty *fees*—which are limited—and penalty *rates*—which are not—it is hard to justify limiting one but not the other.[346]

It is not completely clear why Congress confined the Credit CARD Act's amount limits to penalty fees,[347] though some clues can be found in the events leading up to enactment of the statute. Professor Mary Beth Matthews explained that Congress heard testimony that "the cardholders who generate the greatest income for credit card issuers are . . . those who 'stumble and slide'—i.e., miss payments and thereby incur default rates of interest and

342. *See* 15 U.S.C. § 1665d.

343. *See* Will Kenton, *Price Controls Explained: Types, Examples, Pros & Cons*, INVESTOPEDIA (July 2, 2022), [https://perma.cc/7QXF-K2EJ].

344. As Oren Bar-Gill has explained in another context, such a result is both inefficient and, from the consumer's perspective, suboptimal. *See* BAR-GILL, *supra* note 2, at 98 ("Distorted competition in the credit card market leads to inefficient contracts. Inefficient contracts reduce both the total surplus created by the issuer-cardholder relationship and the cardholder's share of this surplus.").

345. *See* discussion *supra* Section I.D.

346. *See* discussion *supra* Section I.D.

347. *See* discussion *supra* Section I.D.

penalty fees."[348] In other words, Congress may have been more focused on penalty fees because it heard that credit card issuers' business model depended on them, unfairly in the view of consumer advocates.[349] That view also finds support in a 2006 U.S. Government Accountability Office ("GAO") report that gave considerable attention to penalty fees, though it certainly did not ignore penalty rates or other fees.[350] That GAO report found that, in 2005, credit card issuers were charging late fees of as much as $39[351] (in contrast, the safe harbor late fee for 2022, seventeen years later, for a first late payment is $30);[352] that 35% of the active credit card customers of the issuers the GAO obtained information from incurred late fees in 2005;[353] and that "[a]lthough no comprehensive data exist publicly, various sources . . . indicated that penalty fees represent around 10 percent of issuers' total revenues and had generally increased."[354] Importantly, for purposes of this Article, the GAO report concluded that credit card disclosures had "serious weaknesses"[355] that resulted in "cardholders . . . often [being]

348. *See* Matthews, *supra* note 92, at 66. In support of her claim, Mathews cited the testimony of then-professor Elizabeth Warren. *Id.* at 67 n.10. Warren explained in that testimony: "[C]ompanies knew that they could make truly extraordinary profits if the customers stumbled and the company loaded up on default rates of interest and penalty fees. In 2005, interest and penalty fee revenues alone added up to a staggering $79 billion." *Examining the Billing, Marketing, and Disclosure Practices of the Credit Card Industry and Their Impact on Consumers: Hearing Before the S. Comm. on Banking, Hous., & Urban Affairs*, 110th Cong. 59 (2007) (statement of Elizabeth Warren, Professor of Law, Harvard Law School) ("Overall, penalty and cash advance fees have climbed from $1.7 billion in 1996 to $12.0 billion in 2003 to $16.4 billion in 2005. [sic] The average late fee has jumped from $13 in 1996 to over $30 in today [sic]. Incredibly, combined penalty ($7.9 billion) and cash advance ($5.3 billion) fees of $13.2 billion exceed the "net" after-tax profits of the entire credit card industry ($12.03 billion) in 2005.") (testimony of Robert Manning, Professor, Rochester Institute of Technology).

349. *See* Matthews, *supra* note 92, at 66; *Regulatory Requirements and Industry Practices of Credit Card Issuers: Hearing Before the S. Comm. on Banking, Hous., & Urban Affairs*, 109th Cong. 88 (2005) (statement of Travis B. Plunkett, Legislative Director, Consumer Federation of America) ("Traditionally, penalty fees were designed to deter irresponsible cardholder behavior, but in recent years these fees have become primarily a revenue enhancer for credit card issuers. Late fees, for example, have been steadily rising over the past half-decade.").

350. *See* GAO REPORT, *supra* note 110, at 18.

351. *Id.* at 20.

352. *See supra* note 100 and accompanying text.

353. *See* GAO Report, *supra* note 110, at 5.

354. *Id.* at 72.

355. *Id.* at 6.

unable to identify key rates or terms and often fail[ing] to understand the information in the[] documents."[356] Though the disclosures then in use were later revamped, in part as a result of the findings of the Macro Study, our findings demonstrate that the current disclosures are even less understandable as to items not directly regulated by the Credit CARD Act than as to items that are. If Congress agreed with the GAO that the disclosures' weaknesses justified regulating penalty fees, it is difficult to say why a similar weakness does not justify limiting non-penalty fees and penalty interest rates.[357]

Another possible explanation is that Congress believed consumers choosing among competing offers would find some terms more salient than others.[358] Consumers might, for example, care more about the annual fee than, say, the late fee because they would know they would have to pay the annual fee as part of the price for having a credit card, but optimistically anticipate that they would never make a late payment and never be assessed a late fee.[359] Thus, Congress might have concluded it need not

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356. *Id.* at 33. The GAO based that conclusion, in part, on interviews with 112 consumers and a usability consultant who conducted additional interviews with a dozen other consumers. *Id.* at 48-49.

357. Remarkably, one study has found that more than half the consumers charged penalty rates did not realize it. *See* Joshua M. Frank, *Priceless or Just Expensive? The Use of Penalty Rates in the Credit Card Industry*, CTR. FOR RESPONSIBLE LENDING 1 (Dec. 16, 2008), [https://perma.cc/8T55-THTD]. If consumers overlook disclosures that they are being charged penalty rates, it seems plausible that they would not be adequately protected by disclosures of what those rates would be.

358. *See* BAR-GILL, *supra* note 2, at 91-96 (discussing how some credit card terms are more salient to consumers than others and how issuers can use non-salient terms as "revenue centers").

359. *See, e.g.*, *Examining the Billing, Marketing, and Disclosure Practices of the Credit Card Industry, and Their Impact on Consumers: Hearing Before the S. Comm. on Banking, Hous., & Urban Affairs*, 110th Cong. 42 (2007) (statement of Travis B. Plunkett, Legislative Director, Consumer Federation of America) ("[C]onsumers do not shop, they do not shop around, based on an assumption that they are going to pay a—make a payment a day late. They are overly optimistic, and research from behavioral economists has shown this, about their ability to meet their financial obligations. . . . They look at annual fees. And it is true that many cards now do not include an annual fee. They do not look at the back end fees."); *The Credit Cardholders' Bill of Rights: Providing New Protections for Consumers: Hearing Before the Subcomm. on Fin. Insts. & Consumer Credit of the H. Comm. on Fin. Servs.*, 110th Cong. 145 (statement of Katherine Porter, Professor of Law, University of Iowa College of Law) (2008) ("Serious cognitive barriers hinder consumers from making effective use of disclosures, including a tendency to underestimate the likelihood that they will encounter a penalty under the contract."). As for the general tendency to optimism, *see* David A. Armor & Shelley E. Taylor, *When Predictions Fail: The Dilemma of Unrealistic*

regulate annual fees because the market would attend to them but that even consumers who understand the late fee disclosure might disregard it as something that they are unlikely to pay.[360] If consumers typically ignore a disclosure, lenders are less constrained in what they can charge for it and have an incentive to charge a supra-competitive price.[361] This theory finds support in another statement in the GAO report:

> [M]any consumers focus primarily on the amount of the interest rate for purchases when deciding to obtain a new credit card and give less consideration to the level of penalty charges and rates that could apply if they were to miss a payment or violate some other term of their card agreement.[362]

But again, it is hard to understand why Congress would have expected consumers to focus on the penalty *rate* for making a late payment but not the penalty *fee*, inasmuch as they are triggered by the same event.[363] The statement from the GAO report does not distinguish between penalty rates and fees and thus could

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Optimism, *in* HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT 334, 334 (Thomas Gilovich et al. eds., 2002) ("One of the most robust findings in the psychology of prediction is that people's predictions tend to be optimistically biased."); Melvin Aron Eisenberg, *The Emergence of Dynamic Contract Law*, 88 CAL. L. REV. 1743, 1782 (2000) (finding that contracting parties tend to be "unrealistically optimistic"); Neil D. Weinstein, *Unrealistic Optimism About Future Life Events*, 39 J. PERSONALITY & SOC. PSYCHOL. 806, 806, 818–19 (1980).

360. *See* Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. CHI. L. REV. 1203, 1206 (2003) ("While sellers have an economic incentive to provide the efficient level of quality for the attributes buyers consider ('salient' attributes), they have an incentive to make attributes buyers do not consider ('non-salient' attributes) favorable to themselves, as doing so will not affect buyers' purchasing decisions."); *Seduction by Plastic*, *supra* note 319, at 1394 (claiming "annual rates are the most salient non-contingent element"); DAVID S. EVANS & RICHARD SCHMALENSEE, PAYING WITH PLASTIC: THE DIGITAL REVOLUTION IN BUYING AND BORROWING 211 (1999) ("Service fees (such as late fees, over-limit fees, and finance charges on cash advances) provide revenues to issuers but are likely to be largely invisible to most consumers trying to choose between different credit card plans.").

361. *Cf. CFPB Finds Credit Card Companies Charged $12 Billion in Late Fee Penalties in 2020*, CFPB (Mar. 29, 2022), [https://perma.cc/4CFW-QVHE] ("Markets work best when companies compete on price and service, rather than relying on back-end fees that obscure the true cost.").

362. GAO REPORT, *supra* note 110, at 31.

363. Perhaps Congress believed that by blocking credit card issuers from charging penalty rates for late payment until consumers had missed payments for sixty days, it had done all that was needed to address penalty rates, though it is hard to understand why Congress would have so concluded. *See supra* text accompanying note 95.

hardly justify treating them differently.[364] Similarly, it does not mention non-penalty fees at all.[365] While it is reasonable for Congress to conclude that consumers will focus on annual fees, it is not clear that consumers will generally pay attention to, for example, cash advance fee disclosures. Occasional witness statements in the hearings offer possible support for Congress's decisions, but it remains unclear whether the statements were communicated to Congress as a whole, much less were the basis for the decision.[366]

One response the financial industry might make to the foregoing is that extending the Credit CARD Act penalty fee limits to other fees and to penalty rates would increase the cost of credit and reduce its availability.[367] In evaluating that claim, experience under the Credit CARD Act itself may be instructive. Researchers both within and without the CFPB have studied the impact of the Credit CARD Act on credit card lending.[368] That task is made considerably more difficult by the fact that the Credit

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364. *See supra* text accompanying note 362.

365. *See supra* text accompanying note 363.

366. For an example, *see The Credit Cardholders' Bill of Rights: Providing New Protections for Consumers: Hearing Before the Subcomm. on Fin. Insts. & Consumer Credit of the H. Comm. on Fin. Servs.*, 110th Cong. 78 (statement of Lawrence M. Ausubel, Professor of Economics, University of Maryland) (2008) ("I am unaware of any empirical evidence that the magnitude of higher prices imposed bears any close relation to the magnitude of enhanced risk faced by the issuers. Quite to the contrary, it is evident from other aspects of current credit card pricing that the levels of many fees are based more on the relative insensitivity of consumer demand than on any particular relation to cost. Good examples are: the 3% surcharges recently imposed by most issuers on credit card transactions made in foreign currencies; the $39 late fees imposed irrespective of the number of days the payment is late; and overlimit fees imposed on consumers for whom the issuer is happy to increase the credit line."). While that may explain the imposition of limits on penalty fees, it also supports such limits on foreign currency transactions, as to which Congress did not place restrictions.

367. This was one of the arguments against enacting the original Credit CARD Act. *See id.* at 14 (statement of Jeb Hensarling, Member, H. Comm. on Financial Services) ("I fear again that if we adopt the provisions of this, too many Americans will either be denied credit or see their credit card costs skyrocket, and no longer be able to pay for the bills they need in their everyday lives.").

368. The Credit CARD Act directed the Federal Reserve to report to Congress every second year on various aspects of the credit card market, including the extent to which the CARD Act itself had affected the availability and cost of credit. *See* Credit Card Accountability Responsibility and Disclosure Act of 2009, Pub. L. No. 111-24, § 502(a), 123 Stat. 1734, 1755-56 (codified at 15 U.S.C. § 1616). When the CFPB assumed responsibility for the CARD Act, it also assumed responsibility for preparation of the report. *See supra* note 94 and accompanying text.

CARD Act was enacted at a time when the country was still suffering the effects of the Great Recession, and it is difficult to know whether later changes in credit card borrowing were caused by the statute, by the economic climate, or by something else entirely.[369] In addition, the Credit CARD Act had many provisions other than the penalty fees provisions that we have discussed, and many of the statute's effects may be attributable to these other provisions rather than to the penalty fee limitations.

The CFPB's biannual assessments of the Credit CARD Act were, on balance, positive through 2017.[370] For example, the CFPB's 2015 report suggested that the Credit CARD Act had helped consumers.[371] The 2015 study reported:

> [T]he overall ratio of fees to balances remains significantly below pre-CARD Act levels for consumers in all credit score ranges. Consumers continue to pay less in fees, both absolutely and relative to their balances, than before the implementation of the CARD Act. . . . The total cost of credit (or "TCC") for credit card holders has also remained unchanged over the last few years, preserving the significant decline from pre-CARD Act levels that our 2013 study reported.[372]

According to the 2015 report, late fees were "well below their pre-CARD Act levels."[373] Nor had issuers made up the shortfall by raising annual fees, which had been left unregulated.[374] And it found that other unregulated fees, such as balance transfer fees, had not changed much since 2012.[375] The 2017 report reported similar findings and noted it did not find a

369. *See* CONSUMER FIN. PROT. BUREAU, THE CONSUMER CREDIT CARD MARKET 113 (2019) [hereinafter CFPB, 2019 CREDIT CARD MARKET], [https://perma.cc/QTG6-853N] ("[T]he Bureau consistently noted the difficulty of separating regulatory effects from other effects.").

370. *See* CFPB, 2017 CREDIT CARD MARKET, *supra* note 25, at 6.

371. *See* CONSUMER FIN. PROT. BUREAU, THE CONSUMER CREDIT CARD MARKET 10 (2015), [https://perma.cc/74DD-M3C4].

372. *Id.* at 12.

373. *Id.* at 68.

374. *Id.* at 70 (annual fees were "just below pre-CARD Act levels").

375. *Id.* at 72.

reduction in credit volumes.[376] Some outside studies also took a positive view of the Credit CARD Act's effects.[377]

On the other hand, after a change in the Bureau's leadership,[378] the Bureau's 2019 report concluded that empirical studies "suggest[ed] that the CARD Act's effect on consumer welfare [was] mixed."[379] For example, some studies found reduced competition,[380] that card issuers imposed lower credit limits,[381] or otherwise reduced the availability of credit, especially to higher-risk borrowers.[382] Much of the research in question focused on aspects of the Credit CARD Act other than the limits

376. *See* CFPB, 2017 CREDIT CARD MARKET, *supra* note 25, at 7-10 ("The cost of card credit remains largely stable since our last report. . . . [W]e find substantial evidence that credit availability is significant and increasing.").

377. *See, e.g.*, Oren Bar-Gill & Ryan Bubb, *Credit Card Pricing: The Card Act and Beyond*, 97 CORNELL L. REV. 967, 967 (2012) ("We find that the rules have substantially reduced the back-end fees directly regulated by the CARD Act, including late fees and over-the-limit fees. However, unregulated contract terms, such as annual fees and purchase interest rates, have changed little."); Sumit Agarwal et al., *Regulating Consumer Financial Products: Evidence from Credit Cards*, 130 Q.J. ECON. 111, 111 (2015) ("We estimate that regulatory limits on credit card fees reduced overall borrowing costs by an annualized 1.6% of average daily balances . . . . We find no evidence of an offsetting increase in interest charges or a reduction in the volume of credit. Taken together, we estimate that the CARD Act saved consumers $11.9 billion a year.").

378. The CFPB's first director was Richard Cordray, a Barack Obama nominee. Nikki Sutton, *President Obama Nominates Richard Cordray to Lead Consumer Financial Protection Bureau*, THE WHITE HOUSE: PRESIDENT BARACK OBAMA (July 18, 2011, 3:55 PM), [https://perma.cc/N2NH-UQ7S]. By 2019, the CFPB was helmed by Kathy Kraninger, a Donald Trump nominee. Boris Sanchez & Clare Foran, *Trump Intends to Nominate Kathy Kraninger to Lead Consumer Financial Protection Bureau*, CNN (June 16, 2018, 8:00 PM), [https://perma.cc/5NE9-AJ6B].

379. *See* CFPB, 2019 CREDIT CARD MARKET, *supra* note 369, at 136.

380. *See, e.g.*, Yiwei Dou et al., *Does Price Regulation Affect Competition? Evidence from Credit Card Solicitations* (FEDS Working Paper No. 2019-018, 2019), [https://perma.cc/GP4B-8YSB].

381. *See* Larry Santucci, *A Tale of Two Vintages: Credit Limit Management Before and After the CARD Act and Great Recession* 28-31 (Fed. Rsrv. Bank of Phila. Payment Cards Ctr., Discussion Paper No. 15-01, 2015), [https://perma.cc/9K3M-KEFW] (noting that it was not possible to distinguish between the effects of the Great Recession and the CARD Act).

382. *See* Yiwei Dou et al., *The Credit Card Act and Consumer Debt Structure* 17 (Fed. Rsrv. Bank of Phila. Rsch. Dep't, Working Paper No. 20-32, 2022), [https://perma.cc/AD4G-M9BH]; Gregory Elliehausen & Simona M. Hannon, *The Credit Card Act and Consumer Finance Company Lending*, 34 J. FIN. INTERMEDIATION 109, 117 (2018); Song Han et al., *Unsecured Credit Supply, Credit Cycles, and Regulation*, 31 REV. FIN. STUD. 1184, 1184, 1215 (2018).

to penalty fees and thus is less useful in evaluating the effect of that limit.[383]

It seems fair to say that the Credit CARD Act's penalty fee limits lowered the amount of penalty fees consumers were charged and that whether the statute's net effects were positive or negative remains a subject of debate in which views may be affected by which side of the political aisle the observer stands on. However, it is difficult to see how limiting charges to those that are reasonable and proportional would, by itself, limit access to credit. Even if it did, such a limitation might not be a problem. A credit card issuer that is willing to extend credit only if its charges are unreasonable and disproportional sounds like a predatory lender.[384]

Free-market zealots might still argue that it should be up to individual consumers to decide the terms of their loans, or even that consumers should be free to agree to unregulated contracts the terms of which they cannot understand. But recall that it was unwise borrowing on terms that consumers could not fathom that produced the Great Recession.[385] Society has an interest in preventing such debacles—a sort of economic self-defense argument—that justifies some limits to improvident borrowing.[386] In then-professor Elizabeth Warren's familiar example:

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383. *See, e.g.*, Tiago Pinheiro & Joshua Ronen, *Unintended Consequences of the Credit Card Act*, 1 J.L. FIN. & ACCT. 93, 93, 117 (2016) (analysis limited to Credit CARD Act's interest rate rules).

384. When the Federal Reserve issued the Regulation Z provision implementing the "reasonable and proportional" requirement, it explained that it believed Congress meant the words required

> that there be a reasonable and generally consistent relationship between the dollar amounts of credit card penalty fees and the violations for which those fees are imposed, while providing the Board with substantial discretion in implementing that requirement. . . . [T]he dollar amount of a penalty fee is generally reasonable and proportional to a violation if it represents a reasonable proportion of the total costs incurred by the issuer as a result of all violations of the same type.

Truth in Lending, 75 Fed. Reg. 37526, 37532 (June 29, 2010) (codified at 12 C.F.R. pt. 226). Such a definition should enable credit card issuers to cover their costs as to the particular conduct involved and so extending it to other items should not penalize issuers that compete fairly.

385. *See* Sovern, *TILA*, *supra* note 62, at 786.

386. *Id.* at 833-37.

> It is impossible to buy a toaster that has a one-in-five chance of bursting into flames and burning down your house. But it is possible to refinance an existing home with a mortgage that has the same one-in-five chance of putting the family out on the street—and the mortgage won't even carry a disclosure of that fact to the homeowner.[387]

To be sure, mortgages and credit cards are different products, but with credit card balances nearing $1 trillion,[388] mass defaults on credit cards might be nearly as damaging societally as the Great Recession's mortgage defaults. Improvident lending can be disastrous in many forms for some borrowers, as for example, when a consumer gets caught in a debt trap.[389]

D. Implications for Non-Credit Card Consumer Lending

We did not study disclosures for consumer loans other than credit cards and so cannot offer definitive conclusions regarding whether consumers can understand them. Other disclosures are sufficiently different from the Schumer Box and periodic statement that it is conceivable that consumers might grasp them more readily. However, we suspect that, as many consumers have difficulty with the credit card disclosures, they also have problems understanding other loan disclosures.

Take, for example, the forms used for car loans.[390] Because the model forms were adopted before creation of the CFPB, agency officials were under no statutory obligation to test the model forms on consumers, so we do not know if they are even

387. Elizabeth Warren, *Unsafe at Any Rate*, DEMOCRACY J., no. 5, Summer 2007, [https://perma.cc/8U7U-9BRJ].

388. *See Quarterly Report on Household Debt and Credit: 2023: Q1*, FED. RSRV. BANK OF N.Y., May 2023, [https://perma.cc/97PN-56YF].

389. *See* CONSUMER FIN. PROT. BUREAU, PAYDAY LOANS AND DEPOSIT ADVANCE PRODUCTS 43-44 (2013) ("[M]any consumers are unable to repay their loan in full and still meet their other expenses. Thus, they continually re-borrow and incur significant expense to repeatedly carry this debt from pay period to pay period. . . . [T]he high cost of the loan or advance may itself contribute to the chronic difficulty such consumers face in retiring the debt.").

390. Car loans are considered closed-end loans, which are loans for specified amounts, as opposed to open-end loans, such as credit cards, which may have a credit limit but as to which the consumer ordinarily does not borrow the entire amount from the beginning. *See* 12 C.F.R. § 1026.2(a)(10), (20) (2023). For most closed-end loans, including car loans, the disclosure rules are set out at 12 C.F.R. §§ 1026.17, 1026.18 (2023).

as effective as credit card disclosures at conveying loan terms.[391] But we do have reason for concern. In the wake of the Great Recession, which was caused in significant part by mortgage issues, the CFPB designed new mortgage disclosure forms that went through extensive consumer testing.[392] Among the discoveries along the way was that consumers "often do not grasp the basics of Annual Percentage Rate."[393] The Bureau responded by de-emphasizing the APR disclosure in its mortgage forms, moving it to the third page of its model estimate form and the fifth page of its closing form, which is likely to be well past the point at which most consumers stop reading.[394] But the forms for car loans still require that the APR be one of the three most conspicuous disclosures.[395] In other words, a decade after the CFPB learned that consumers do not know what the APR is, its car loan forms still prioritize that term over, for example, the amount of the monthly payments. Surely, that alone raises questions about how useful consumers find the car loan disclosures.

Some evidence shows that consumers struggle to understand other mandated disclosures.[396] For example, the CFPB engaged a firm to conduct quantitative testing during the development of its mortgage forms.[397] According to this testing, less than two-thirds of the respondents were able to correctly answer questions

391. For an example of the Bureau's model disclosure forms for car loans, *see* 12 C.F.R. app. H-10 (2023).

392. *See* Raj Date, *Lessons Learned from the Financial Crisis: The Need for the CFPB*, CONSUMER FIN. PROT. BUREAU (Sept. 15, 2011), [https://perma.cc/8F63-UHZA].

393. *See* KLEIMANN COMMC'N GRP., KNOW BEFORE YOU OWE: EVOLUTION OF THE INTEGRATED TILA-RESPA DISCLOSURES 303-04 (2012) (noting the results of research related to TILA-RESPA disclosures).

394. For an example of the Bureau's model mortgage loan estimate disclosure form, *see* 12 C.F.R. app. H-24(A) (2023). For an example of a mortgage loan closing disclosure form, *see* 12 C.F.R. app. H–25(A) (2023).

395. *See* 12 C.F.R. § 1026.17(a)(2) (2023). The other two items that must be most conspicuous are the finance charge and the creditor's identity. 12 C.F.R. § 1026.17(a)(2).

396. S*ee* Joan Warrington, *Disclosure as a Consumer Protection, in* THE IMPACT OF PUBLIC POLICY ON CONSUMER CREDIT 145, 146 (Thomas A. Durkin & Michael E. Staten eds., 2002) ("Even with a law degree and a career in consumer credit, I still have problems understanding many of the disclosures that I see.").

397. *See* KLEIMANN COMMC'N GRP., KNOW BEFORE YOU OWE: QUANTITATIVE STUDY OF THE CURRENT AND INTEGRATED TILA-RESPA DISCLOSURES (2013).

about some of the matters disclosed on the forms.[398] It thus seems clear that whatever protection TILA provides some consumers, others must find safety elsewhere.

CONCLUSION

Our study shows that consumers understood disclosures significantly less well on Apple phones, devices that consumers increasingly use to engage in financial transactions.[399] That suggests that as more consumers move their financial transactions to iPhones, disclosures will confer less protection.

Our study also suggests that existing law inadequately protects consumers against excessively-priced credit cards and fails to help many choose the best credit card available.[400] Whether disclosures are provided on paper, a computer, or a smartphone, consumers could not understand more than a third of the disclosures.[401] Nearly two-thirds of our respondents could not answer 65% of the questions we posed correctly.[402] Yet, as to most credit card terms, disclosure is the only consumer protection consumers receive.[403] All this suggests that predatory lenders and those charging supra-competitive prices are able to attract customers who would be better off with lower-priced cards if they could only tell the difference between the two types of cards.

Lawmakers have already limited the amounts credit card issuers can charge as to penalty fees, even though consumers are better able to understand penalty fee disclosures than other items.[404] Our study suggests that if lawmakers want to protect consumers against excessive charges, Congress should expand

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398. For example, only 64.7% could state correctly the first monthly payment, and only 65.1% could determine that the loan amount would not increase after closing. *Id.* at C-6, C-11, H-2 tbl.8, H-3 tbl.8. For another example of sizable numbers of consumers being unable to understand mandated disclosures, *see* Jeff Sovern & Kate E. Walton, Are Validation Notices Valid? An Empirical Evaluation of Consumer Understanding of Debt Collection Validation Notices, 70 SMU L. REV. 63 (2017) (describing a number of respects in which many consumers could not understand debt collection disclosures).

399. *See* discussion *supra* Part IV.

400. *See* discussion *supra* Section V.B.

401. *See* discussion *supra* Part IV.

402. *See* discussion *supra* Part IV.

403. *See* discussion *supra* Part I.

404. *See* discussion *supra* Section IV.C.

those protections to limit what credit card issuers can charge for, at a minimum, penalty rates and non-penalty fees. Alternatively, Congress must find ways to make disclosures more effective. Otherwise, for many consumers, Congress will have provided the illusion of consumer protection without the reality.

Table 1A. *Individual question accuracy: computer and smartphone users*

		% Correct	p value			% Correct	p value
Total Score	Smartphone	57%	0.002	Q71	Smartphone	38%	0.054
	Computer	62%			Computer	45%	
Q32	Smartphone	47%	<0.001	Q73	Smartphone	76%	0.272
	Computer	60%			Computer	79%	
Q34	Smartphone	79%	0.640	Q75	Smartphone	45%	0.331
	Computer	81%			Computer	48%	
Q36	Smartphone	44%	0.129	Q77	Smartphone	43%	0.003
	Computer	50%			Computer	54%	
Q38-Fee	Smartphone	75%	0.097	Q79	Smartphone	84%	0.120
	Computer	80%			Computer	88%	
Q38-Interest	Smartphone	42%	0.008	Q81	Smartphone	45%	0.129
	Computer	32%			Computer	50%	
Q40	Smartphone	53%	0.001	Q83	Smartphone	44%	0.250
	Computer	66%			Computer	40%	
Q42	Smartphone	25%	0.911	Q85	Smartphone	37%	0.147
	Computer	25%			Computer	31%	
Q51	Smartphone	62%	0.023	Q87	Smartphone	15%	0.292
	Computer	70%			Computer	19%	
Q53	Smartphone	72%	0.078	Q91	Smartphone	88%	0.155
	Computer	78%			Computer	92%	
Q55	Smartphone	73%	0.001	Q93-Fee	Smartphone	76%	<0.001
	Computer	84%			Computer	87%	
Q58	Smartphone	68%	0.888	Q93-Interest	Smartphone	62%	0.667
	Computer	68%			Computer	60%	
Q67	Smartphone	61%	<0.001	Q95	Smartphone	62%	<0.001
	Computer	77%			Computer	77%	
Q69	Smartphone	89%	0.245	Q97	Smartphone	42%	0.172
	Computer	91%			Computer	47%	

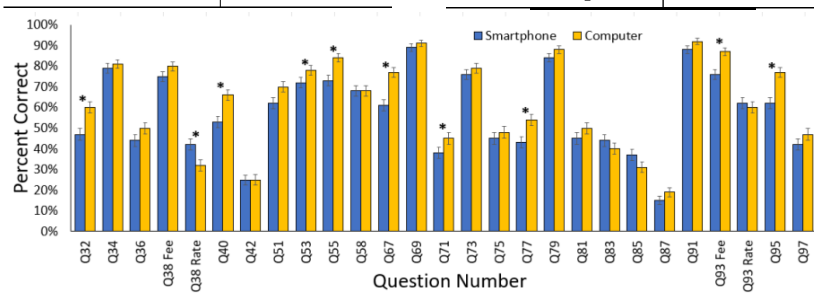


Table 1B. *Individual question accuracy: Apple, Samsung, LG, Motorola, and Computer Users*

					%			%
Total Score	Apple	54%	Q55	Apple	66%	Q83	Apple	42%
	Samsung	63%		Samsung	86%		Samsung	47%
	LG	59%		LG	65%		LG	60%
	Motorola	53%		Motorola	72%		Motorola	33%
	Computer	62%		Computer	84%		Computer	39%
Q32	Apple	42%	Q58	Apple	65%	Q85	Apple	32%
	Samsung	56%		Samsung	73%		Samsung	43%
	LG	30%		LG	70%		LG	50%
	Motorola	39%		Motorola	67%		Motorola	22%
	Computer	61%		Computer	68%		Computer	31%
Q34	Apple	79%	Q67	Apple	55%	Q87	Apple	12%
	Samsung	82%		Samsung	69%		Samsung	20%
	LG	65%		LG	60%		LG	20%
	Motorola	89%		Motorola	67%		Motorola	11%
	Computer	81%		Computer	77%		Computer	18%
Q36	Apple	39%	Q69	Apple	83%	Q91	Apple	91%
	Samsung	53%		Samsung	96%		Samsung	91%
	LG	40%		LG	90%		LG	90%
	Motorola	44%		Motorola	94%		Motorola	67%
	Computer	50%		Computer	91%		Computer	92%
Q38-Fee	Apple	76%	Q71	Apple	32%	Q93-Fee	Apple	80%
	Samsung	75%		Samsung	40%		Samsung	77%
	LG	85%		LG	45%		LG	80%
	Motorola	72%		Motorola	44%		Motorola	61%
	Computer	80%		Computer	45%		Computer	87%
Q38-Interest	Apple	41%	Q73	Apple	69%	Q93-Interest	Apple	62%
	Samsung	44%		Samsung	83%		Samsung	62%
	LG	35%		LG	80%		LG	75%
	Motorola	44%		Motorola	72%		Motorola	44%
	Computer	32%		Computer	79%		Computer	60%
Q40	Apple	49%	Q75	Apple	38%	Q95	Apple	60%
	Samsung	59%		Samsung	53%		Samsung	65%
	LG	75%		LG	35%		LG	70%

	Motorola	50%
	Computer	66%
Q42	Apple	22%
	Samsung	28%
	LG	15%
	Motorola	28%
	Computer	25%
Q51	Apple	55%
	Samsung	68%
	LG	70%
	Motorola	61%
	Computer	70%
Q53	Apple	65%
	Samsung	80%
	LG	60%
	Motorola	72%
	Computer	77%

	Motorola	33%
	Computer	48%
Q77	Apple	36%
	Samsung	48%
	LG	50%
	Motorola	39%
	Computer	55%
Q79	Apple	79%
	Samsung	91%
	LG	85%
	Motorola	83%
	Computer	88%
Q81	Apple	36%
	Samsung	55%
	LG	50%
	Motorola	33%
	Computer	50%

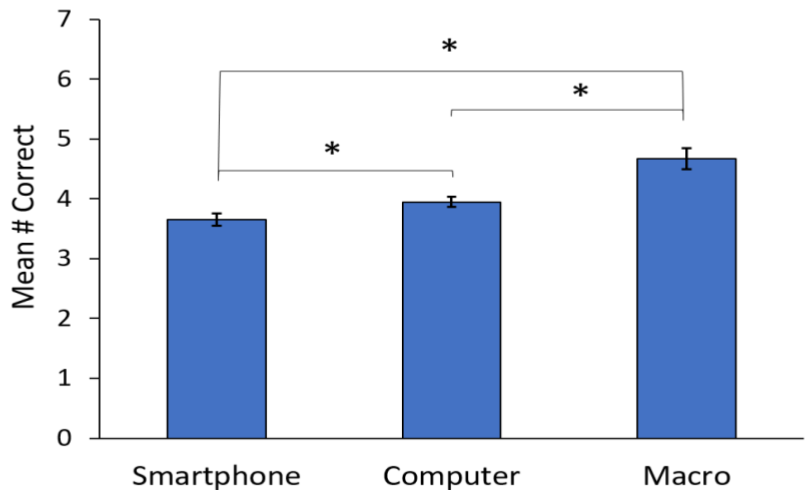
	Motorola	56%
	Computer	77%
Q97	Apple	41%
	Samsung	44%
	LG	50%
	Motorola	33%
	Computer	47%

Table 2.
Individual question percent correct (Schumer Box and Periodic Statement): Our new respondents compared to Schumer Box 8 and Periodic Model 9 combined Macro respondents

		%	**Total**	***p***
Total Score	New	57%	58%	0.078
	Macro	61%		
Q32	New	54%	57%	<0.001
	Macro	68%		
Q34	New	80%	77%	<0.001
	Macro	68%		
Q36	New	47%	51%	<0.001
	Macro	63%		
Q38 Fee	New	78%	80%	0.001
	Macro	88%		
Q38 Rate	New	37%	45%	<0.001
	Macro	71%		
Q40	New	59%	61%	0.148
	Macro	65%		
Q42	New	25%	30%	<0.001
	Macro	48%		
Q67	New	69%	73%	<0.001
	Macro	88%		
Q69	New	90%	88%	<0.001
	Macro	80%		
Q71	New	41%	45%	<0.001
	Macro	58%		
Q73	New	78%	76%	0.086
	Macro	72%		
Q75	New	46%	48%	0.029
	Macro	55%		
Q77	New	49%	51%	0.013
	Macro	59%		
Q79	New	86%	86%	0.489
	Macro	84%		
Q81	New	47%	48%	0.576
	Macro	50%		
Q83	New	42%	38%	<0.001
	Macro	26%		
Q85	New	34%	30%	<0.001
	Macro	16%		
Q87	New	17%	15%	<0.001
	Macro	6%		
Q91	New	90%	87%	<0.001
	Macro	79%		
Q93 Fee	New	82%	80%	0.043
	Macro	75%		
Q93 Rate	New	61%	64%	0.004
	Macro	72%		
Q95	New	69%	66%	0.084
	Macro	63%		
Q97	New	44%	50%	0.021
	Macro	54%		

Table 3A.
Schumer box questions: mean number correct for Smartphone, Computer, and Macro respondents.

	Mean (SD)
Smartphone	3.65 (1.83)
Computer	3.95 (1.61)
Macro	4.67 (1.93)



(Error bars represent standard error of the mean, * indicate $p < 0.05$)

Table 3B.
Schumer box questions: mean number correct for Apple, Samsung, LG, and Motorola respondents.

	Mean (SD)
Apple	3.47 (1.89)
Samsung	3.97 (1.74)
LG	3.45 (1.88)
Motorola	3.67 (1.61)
Computer	3.95 (1.61)

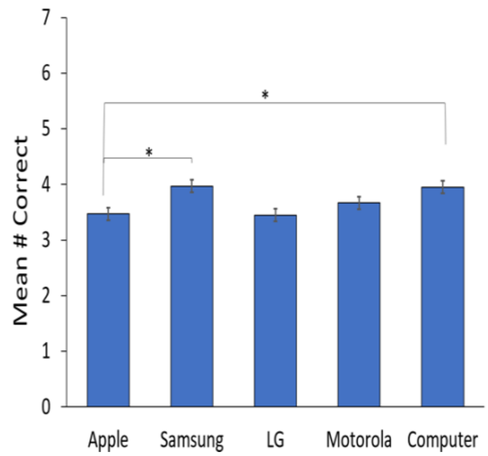
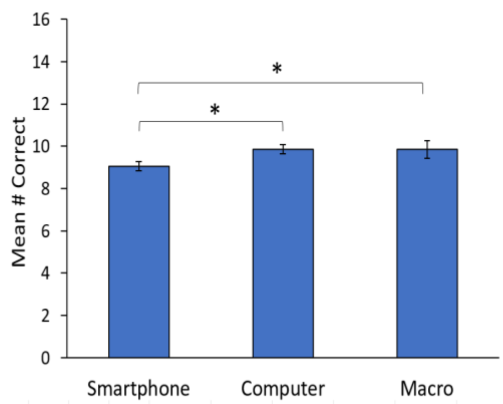


Table 4A.
Periodic statement questions: mean number correct for smartphone, computer, and Macro respondents.

	Mean (SD)
Smartphone	9.05 (3.94)
Computer	9.86 (3.73)
Macro	9.84 (3.97)



(Error bars represent standard error of the mean, * indicate $p < 0.05$)

Table 4B.
Periodic statement questions: mean number correct for Apple, Samsung, LG, and Motorola respondents.

	Mean (SD)
Apple	8.49 (3.93)
Samsung	9.81 (3.56)
LG	9.90 (4.41)
Motorola	7.94 (4.21)
Computer	9.84 (3.72)

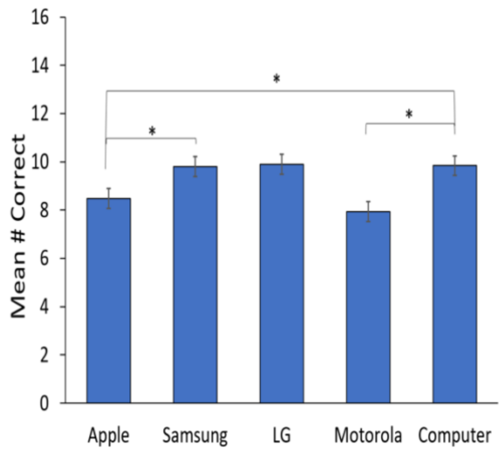


Table 5.
Mean number correct for Schumer, Periodic Statement, and Bank comparison questions by race.

	Schumer	Periodic	Bank	Total
	Mean (SD)	**Mean (SD)**	**Mean (SD)**	**Mean (SD)**
White	4.00 (1.69)	9.99 (3.70)	2.91 (1.09)	16.90 (5.61)
Latine	3.08 (1.75)	7.69 (4.29)	2.78 (1.05)	13.55 (6.01)
Black/African American	3.41 (1.74)	8.49 (3.79)	2.72 (1.18)	14.62 (5.86)

Table 6. *Devices used*

Device	Number of Consumers
Smartphone	330
Computer	329

Table 7A. *Phones of users*

Smartphone	Number of Consumers	*p*
LG/Motorola	38	0.096 0.50
Samsung	116	
Apple	154	
Unknown	23	

Table 7B. *Cohen's test and bootstrapping test: Samsung and LG/Motorola users*

Test	*d*
Cohen's	0.055
Bootstrapping	No Effect

Table 8A. *Total question percent correct by gender*

Gender	% Correct	*p*
Male	60.5%	0.64
Female	59.7%	

Table 8B. *Total question percent correct by region*

Region	% Correct	*p*
Midwest	60.9%	0.86
Northeast	59.8%	
South	59.5%	
West	58.8%	

Table 8C. *Total question percent correct by credit limits*

Credit Limit	% Correct	ANOVA *p*
Unknown	60.2%	0.61
No Credit Card	60.2%	
< \$1,000	58.5%	
\$1,000 to \$4,000	57.2%	
\$4,000 to \$8,000	58.6%	
> \$8,000	63.1%	

Table 8D. *Total periodic statement question percent correct by age*

Age	% Correct	p	
18 to 24	56.0%		
25 to 34	57.3%	0.035	
35 to 54	57.9%	0.047	
55 or Older	62.4%		

Table 8E. *Total Schumer Box performance significance by age*

Age	p
18 to 24	
25 to 34	0.22
35 to 54	
55 or Older	

Table 8F. *Total question percent correct by income*

Income	% Correct	p	
< $25,000	56.7%		0.006
$25,000 to $50,000	59.9%	0.08	0.028
$50,001 to $75,000	63.9%		0.001
$75,001 to $100,000	53.9%	0.013	0.28
> $100,000	61.1%		

Table 8G. *Total question percent correct by credit card duration*

Credit Card Obtention Date	% Correct	p	
No Credit Card	56.4%		
5 to 10 Years Ago	54.4%	< 0.001	0.047
> 10 Years Ago	62.5%		

Table 9. *Schumer Box and Periodic Statement accuracy by education*

Question	p
Schumer Box	0.49
Periodic Statement	0.39

Table 10A. *Apple and Samsung demographic characteristics*

Characteristic	***p***
Education	0.95
Credit Limit	0.30
Income	0.79
Credit Card	0.15
Gender	0.18
Race	0.16
Age	0.005
Region	0.027

Table 10B. *Apple and Samsung age ranges*

Age	**Total Users**
18 to 24	Apple: 18 Samsung: 6
25 to 34	Apple: 60 Samsung: 32
35 to 54	Apple: 68 Samsung: 61
55 or Older	Apple: 8 Samsung: 17

Table 10C. *Apple and Samsung regional users*

Region	**Total Users**
Midwest	Apple: 26 Samsung: 27
Northeast	Apple: 33 Samsung: 37
South	Apple: 65 Samsung: 30
West	Apple: 30 Samsung: 22

Table 11A. *Schumer Box accuracy by race*

Race	**% Correct**	***p***
African American	48.7%	0.004
White	57.1%	<0.001
Latine	44.0%	

Table 11B. *Periodic Statement accuracy by race*

Race	**% Correct**	***p***
African American	48.1%	<0.001
White	57.4%	<0.001
Latine	44.8%	

Table 11C. *Schumer Box Comparison accuracy by race*

Race	**Respondents**	**% Correct**
African American	85	67.9%
White	450	72.7%
Latine	65	69.9%

Table 12. *Percentage of correct responses*

% Correct	Number of Respondents
63%	38
67%	51
70%	49
74%	36
78%	40
81%	34
85%	36
89%	26
93%	15
96%	4
100%	7

Table 13. *Macro Schumer Data*

Schumer Form Seen	Average Number Correct
1	4.25
2	4.94
3	4.54
4	4.59
5	4.45
6	5.08
7	4.55
8	4.67

Appendix A[405]

St. John's University School of Law is conducting a survey into how well consumers understand some disclosures. Thank you for taking the time to participate in this research. First, we are going to show you a notice. Then we will ask you some questions about it. We will repeat that process with two other notices. Then we will ask about some shopping experiences you may have had. If you need to make the print size bigger, please use your device's controls to do so. Before we can ask you the questions, we are required to show you a consent form and ask you to read it and click on the box that says you are willing to answer our questions.

405. For case of reference, the question numbers referred to in the text appear in this version in brackets (e.g., [Q41]). When respondents took the survey, the numbers were not visible to them.

Consent Form

[Q41] By clicking "Yes" below, you agree to participate in this survey of your own free will. You may refuse to participate or withdraw at any time. If at any time you decide not to participate, you will not be penalized in any way, except that you will not get paid for your time. You have the right to skip a question. You have a right not to answer any question you prefer not to answer. There are no known risks associated with your participation in this research beyond the risks of everyday life. There are two benefits you will receive if you complete the survey. First, you will receive the promised benefit after you complete the survey. Second, your answers may help consumers and researchers. Your identity will remain confidential. We will not make public your participation. Is there anything about the study or your participation in it that is unclear or you do not understand? If so, please contact Professor Jeff Sovern at sovernj@stjohns.edu or through St. John's University at 8000 Utopia Parkway, Jamaica, New York, 11439. If you have any questions about your rights as a research participant, please contact the University's Institutional Review Board at 718-990-1440. Do you consent to answer the questions?

- ○ Yes

[Q2] What kind of device are you taking this survey on?

- ○ A desktop computer
- ○ A laptop computer
- ○ A tablet, such as an iPad
- ○ A smartphone
- ○ ______ Other (please specify)

[Q4] Who manufactured the smartphone on which you are taking this survey?

- ○ Apple
- ○ Samsung
- ○ LG
- ○ Lenovo
- ○ ______ Other (please specify)

[Q5] What model smartphone are you taking this survey on?

[Q6] Do you currently have one or more general-purpose credit cards, such as Mastercard, Visa, Discover or American Express? Please do not include debit or ATM cards, or credit cards that can only be used at a single chain of stores.

- ○ Yes
- ○ No

[Q7] In your household, are you responsible for making credit card decisions such as choosing a new credit card or deciding how much to pay each month?

- ○ Yes
- ○ Yes, in cooperation with my spouse, partner, etc.
- ○ No

[Q8] Do you currently work for a bank or credit card company?

- ○ Yes
- ○ No

[Q10] Which of the following categories best describes your age?

- ○ Below 18
- ○ 18-24
- ○ 25-34
- ○ 35-54
- ○ 55 and over

[Q11] What is the highest level of education you have completed?

- ○ Less than high school
- ○ High school graduate or G.E.D
- ○ Some college or post-secondary work
- ○ College grad or higher

[Q134] What is your gender?

- ○ Male
- ○ Female
- ○ [ ] Other (please specify)

[Q136] What region do you live in?

- ○ Northeast
- ○ Midwest
- ○ South
- ○ West

Today we want to get your reactions to credit card documents that you might receive in the mail or online. We are going to show you some examples of credit card offers and monthly statements that have been created for fictional credit card companies. Then we will ask you some questions about the information shown on the forms. Please feel free to refer to the forms to answer the questions. The first document is part of a credit card offer that you might receive from a credit card company. Please take a minute to review this form just as you would a real credit card offer you received. We will then ask you some questions about the offer. You will be able to look at the page when answering the questions, so you don’t need to memorize any information.

BANK A

Interest Rates and Interest Charges	
Annual Percentage Rate (APR) for Purchases	**8.99%** to **19.99%** based on your creditworthiness. After one year, your APR will vary with the market based on the Prime Rate.
APR for Balance Transfers	**15.99%** After one year, this APR will vary with the market based on the Prime Rate.
APR for Cash Advances	**21.99%** After one year, this APR will vary with the market based on the Prime Rate.
Penalty APR and When It Applies	**28.99%** This APR will be applied to your account if you: 1) Make a late payment; 2) Go over your credit limit; 3) Make a payment that is returned; or 4) Do any of the above on another account that you have with us. **How Long Will the Penalty APR Apply?:** If your APRs are increased for any of these reasons, the Penalty APR will apply until you make six consecutive minimum payments when due.
How to Avoid Paying Interest on Purchases	Your due date is at least 25 days after the close of each billing cycle. We will not charge you any interest on purchases if you pay your entire balance by the due date each month.
Minimum Interest Charge	If you are charged interest, the charge will be no less than $1.50.
For Credit Card Tips from the Consumer Financial Protection Bureau	**To learn more about factors to consider when applying for or using a credit card, visit the website of the Consumer Protection Bureau at http://www.consumerfinance.gov/learnmore**

Fees	
Annual Fees	**None**
Transaction Fees	
• Balance Transfer	$20 if amount of transfer is less than or equal to $1,000; $30 if amount of transfer is more than $1,000
• Cash Advance	**$5**
• Foreign Transaction	**2%** of each transaction in U.S. dollars.
Penalty Fees	
• Late Payment	$25
• Over-the-Credit Limit	$35
• Returned Payment	$35
Other Fees	
• Required Account Protector Plan	**$0.79** per $100 of balance at the end of each statement period. See back for details.

How We Will Calculate Your Balance: We use a method called "average daily balance (including new purchases).

[Q30] What kind of document did you just see?

- ○ A cell phone contract
- ○ A letter summoning you to serve on a jury.
- ○ Part of a credit card offer.
- ○ An offer of a rebate for buying a television.

[Q32] Assume that when you applied for this card, you transferred a balance from another card to this one. What interest rate would you be charged on the balance that you transferred to this card? (If you wish to see the form again, please click here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

The interest rate would be:

- ○ [ ]
- ○ I don't know

[Q34] If you transferred a balance from another credit card to this one, would you be charged a fee? (If you wish to see the form again, please click here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- Yes
- No
- I don't know

[Q36] If you transferred a balance of $2,000, what is the amount of the fee you would pay? (If you wish to see the form again, please click here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

I would be charged a fee of $

- ______
- I don't know

[Q38] What would happen on this account if you went over the credit limit? **Check all that apply.** (If you wish to see the form again, please click here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ☐ I would be charged a fee
- ☐ My interest rate/APR would increase
- ☐ Nothing would happen
- ☐ ______ Other [please specify]
- ☐ I don't know

[Q40] What is the dollar amount of the fee you would pay for going over the credit limit? (If you wish to see the form again, please click here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ ______
- ○ I don't know

[Q42] If you went over the credit limit on this credit card account, what is the interest rate that you would pay on new purchases with this credit card? (If you wish to see the form again, please click here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

The interest rate would be:

- ○ [ ]
- ○ I don't know

Now we will show you part of a credit card offer from another bank. The last one we showed you was from Bank A. The next one will be from Bank B. Please take a minute to review this form just as you would a real credit card offer you received. We will then ask you some questions about the offers from Bank A and Bank B. You will be able to look at the offers when answering the questions, so you don't need to memorize any information.

BANK B

Interest Rates and Interest Charges	
Annual Percentage Rate (APR) for Purchases	**8.99%** to **19.99%** based on your creditworthiness. After one year, your APR will vary with the market based on the Prime Rate.
APR for Balance Transfers	**15.99%** After one year, this APR will vary with the market based on the Prime Rate.
APR for Cash Advances	**17.99%** After one year, this APR will vary with the market based on the Prime Rate.
Penalty APR and When It Applies	**28.99%** This APR will be applied to your account if you: 1) Make a late payment; 2) Go over your credit limit; 3) Make a payment that is returned; or 4) Do any of the above on another account that you have with us. **How Long Will the Penalty APR Apply?:** If your APRs are increased for any of these reasons, the Penalty APR will apply until you make nine consecutive minimum payments when due.
How to Avoid Paying Interest on Purchases	Your due date is at least 25 days after the close of each billing cycle. We will not charge you any interest on purchases if you pay your entire balance by the due date each month.
Minimum Interest Charge	If you are charged interest, the charge will be no less than $5.00.
For Credit Card Tips from the Consumer Financial Protection Bureau	**To learn more about factors to consider when applying for or using a credit card, visit the website of the Consumer Protection Bureau at http://www.consumerfinance.gov/learnmore**

Fees	
Annual Fees	**$30**
Transaction Fees	
• Balance Transfer	$20 if amount of transfer is less than or equal to $1,000; $30 if amount of transfer is more than $1,000
• Cash Advance	**$10**
• Foreign Transaction	**2%** of each transaction in U.S. dollars.
Penalty Fees	
• Late Payment	$35
• Over-the-Credit Limit	$35
• Returned Payment	$35
Other Fees	
• Required Account Protector Plan	**$0.79** per $100 of balance at the end of each statement period. See back for details.

How We Will Calculate Your Balance: We use a method called "average daily balance (including new purchases)

[Q51] Which Bank has the lower initial APR for cash advances? (If you wish to see the form for Bank A again, please click here. If you wish to see the form for Bank B again, please click here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ Bank A
- ○ Bank B
- ○ I don't know

[Q53] Which Bank has the lower annual fee? (If you wish to see the form for Bank A again, please click here. If you wish to see the form for Bank B again, please click here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ Bank A
- ○ Bank B
- ○ I don't know

[Q55] Which Bank has the lower late payment fee? (If you wish to see the form for Bank A again, please click here. If you wish to see the form for Bank B again, please click here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- Bank A
- Bank B
- I don't know

[Q58] Which Bank charges a lower fee for a cash advance? (If you wish to see the form for Bank A again, please click here. If you wish to see the form for Bank B again, please click here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- Bank A
- Bank B
- I don't know

Now we will show you an example of a monthly statement that you might get from a credit card company either in the mail or online by opening a link to your account. The statement is two pages long. Please take a minute to review this information just as you do with your real credit card statements each month. We will then ask you some questions. Again, you will be able to look at this information when answering the questions.

XXX Bank Credit Card Account Statement
Account Number XXXX XXXX XXXX XXXX
February 21, 2022 to March 22, 2022

Summary of Account Activity	
Previous Balance	$535.07
Payments	-$450.00
Other Credits	-$13.45
Purchases	+$529.57
Balance Transfers	+$785.00
Cash Advances	+$318.00
Past Due Amount	+0.00
Fees Charged	**+$69.00**
Interest Charged	**+$10.00**
New Balance	$1,784.53
Credit Limit	$2,000.00
Available credit	$215.47
Statement closing date	3/22/2022
Days in billing cycle	30

Questions?

Call Customer Service	1-XXX-XXX-XXXX
Lost or Stolen Credit Card	1-XXX-XXX-XXXX

Payment Information	
New Balance	$1,784.53
Minimum Payment Due	$53.00
Payment Due Date	4/20/22

Late Payment Warning: If we do not receive your minimum payment by the date listed above, you will have to pay a late fee of $35 and your APRs will be increased to the Penalty APR of 29.99%

Minimum Payment Warning: If you make only the minimum payment each period, you will pay more in interest and it will take you longer to pay off your balance. For example:

If you make no additional charges using this card and each month you pay:	You will pay off the balance shown on this statement in about	And you will end up paying an estimated total of
Only the minimum payment	10 years	$3,284
$62	3 years	$2,232 *(Savings=$1,052)*

If you would like information about credit counseling services, call 1-800-XXX-XXXX

Please send billing inquiries and correspondence to:
PO Box XXXX. Anytown, Anystate XXXXX

Important Changes to Your Account Terms

The following is a summary of changes that are being made to your account terms. Changes to APRs described below are due to changes in market conditions. For more detailed information, please refer to the booklet enclosed with this statement.

These changes will impact your accounst as follows:
Transactions made on or after 4/9/22: As of 5/10/22, changes to APRs described below will apply to these transactions.
Transactions made before 4/9/22: Current APRs will continue to apply to thses transactions.
If you are already being charged a higher Penalty APR for purchases: In this case, changes to APRs described below will not go into effect at this time. These changes will go into effect when the Penalty APR no longer applies to your account.

Revised Terms, as of 5/10/22	
APR for Purchases	16.99%

Transactions

Reference Number	Trans Date	Post Date	Description of Transaction or Credit	Amount
5884186PS0388W6YM	2/22	2/23	Store #1	$2.05
054400060ZLV72VL	2/24	2/25	Store #2	$12.11
55541860705RDYD0X	2/24	2/25	Store #3	$4.63
554328608008W90M0	2/24	2/25	Store #4	$114.95
054830709LYMRPT4L	2/24	2/25	Store #5	$7.35
854338203FS8OO0Z5	2/25	2/25	Pymt Thank You	$450.00-

(transactions continued on next page)

NOTICE: SEE REVERSE SIDE FOR IMPORTANT INFORMATION
(Page 1 of 2)

Please detach this portion and return with your payment to insure proper credit. Retain upper portion for your records.

Account Number:	**XXXX XXXX XXXX XXXX**
New Balance:	**$1,784.53**
Minimum Payment Due:	**$53.00**
Payment Due Date:	**4/20/22**
Amount Enclosed:	$

Please indicate address change and additional
Cardholder requests on the reverse side
XXX Bank
P.O. Box XXXX
Anytown, Anystate XXXXX

XXX Bank Credit Card Account Statement
Account Number XXXX XXXX XXXX XXXX
February 21, 2022 to March 22, 2022

Transactions (cont.)

Reference Number	Trans Date	Post Date	Description of Transaction or Credit	Amount
564891561545KOSHD	2/25	2/26	Store #6	$14.35
841517877845AKOJIO	2/25	2/26	Store #7	$40.35
895848561561894KOH	2/26	2/27	Store #8	$27.68
1871556189456SAMKL	2/26	2/27	Store #9	$124.76
1542202074TWWZV48	2/26	2/26	Cash Advance	$121.50
2564894185186LKDFID	2/27	2/28	Store #10	$32.87
4545754784KOHUIOS	2/27	3/1	Balance Transfer	$785.00
14547847586KDDL564	2/28	2/28	Cash Advance	$196.50
2564561023184102315	2/28	3/1	Store #11	$14.76
55542818705RASD0X	3/1	3/2	Store #12	$3.76
289189194ASDS8744	3/1	3/3	Store #13	$13.45
178105417841045784	3/2	3/6	Store #14	$2.35
045148714518979874	3/4	3/5	Store #13	$13.45-
8456152156181SDSA	3/5	3/12	Store #15	$25.00
31289105205648AWD	3/11	3/12	Store #16	$7.34
04518478415615ASD	3/11	3/16	Store #17	$10.56
0547810544898718AF	3/15	3/17	Store #18	$24.50
056489413216848OP	3/16	3/17	Store #19	$8.76
054894561564ASDW	3/17	3/18	Store #20	$14.23
5648914891AD98156	3/19	3/20	Store #21	$23.76
		Fees		
9525156489SFD4545Q	2/23	2/23	Late Fee	$35.00
564156156470JSNDS	2/26	2/26	Cash Advance Fee	$5.00
84151564SADS8745H	2/27	2/27	Balance Transfer Fee	$23.55
25648915618945156L	2/28	2/28	Cash Advance Fee	$5.90
			TOTAL FEES FOR THIS PERIOD	**$69.45**
		Interest Charged		
			Interest Charge on Purchases	$6.31
			Interest Charge on Cash Advances	$4.58
			TOTAL INTEREST FOR THS PERIOD	**$10.89**

2022 Totals Year-to-Date	
Total fees charged in 2022	$90.14
Total interest charged in 2022	$18.27

Interest Charge Calculation

Your **Annual Percentage Rate (APR)** is the annual interest rate on your account.

Type of Balance	Annual Percentage Rate (APR)	Balance Subject to Interest Rate	Interest Charge
Purchases	14.98% (v)	$512.14	$6.31
Cash Advances	21.99% (v)	$253.50	$4.58
Balance Transfers	0.00%	$637.50	$0.00

(v) = Variable Rate

[Q67] What is the minimum payment that is required for this billing period? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ [ ]
- ○ I don't know

[Q69] Often, people with credit cards can use their cards to get money at ATM machines. These transactions are called "cash advances." Based on the information you have been given, were any cash advances taken during the past billing period? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ Yes
- ○ No
- ○ I don't know

[Q71] What was the dollar amount of the first cash advance taken? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your devices controls to zoom in.)

- ○ [ ]
- ○ I don't know

[Q73] Was a fee charged for this first cash advance? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ Yes
- ○ No
- ○ I don't know

[Q75] What was the dollar amount of the fee that was charged to take out the first cash advance?(If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ [ ]
- ○ I don't know

[Q77] What is the interest rate that you would be charged if you used this card to take out a cash advance? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

The interest rate would be

- ○ [ ]
- ○ I don't know

[Q79] Not including interest charges, were there any fees charged during the billing period on this statement? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- Yes
- No
- I don't know

[Q81] Not including interest charges, how many fees were charged during this billing period? Please give us the number of fees, not the total dollar amount. (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

The number of fees charged was

-
- I don't know

[Q83] If you pay this entire balance in full and on time, are the terms of this account going to change in the near future or are they going to remain the same? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ Terms will change
- ○ Terms will remain the same
- ○ I don't know

[Q85] Based on the information you have been given, is there going to be a change in the interest rate you are charged on new purchases? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ Yes
- ○ No
- ○ I don't know

[Q87] What is the interest rate that will apply to new purchases when the changes go into effect? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

The interest rate for new purchases will be

- ○ ______
- ○ I don't know

[Q89] Please click "No" from the answers below:

- ○ Yes
- ○ No
- ○ I don't know

[Q91] Is there any information on this statement about what would happen if you made a payment late? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ Yes
- ○ No
- ○ I don't know

[Q93] What would happen if you made a payment late? **Check all that apply.** (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ☐ I would be charged a fee
- ☐ My interest rate/APR would increase
- ☐ Nothing would happen
- ☐ Other
- ☐ I don't know

[Q95] If you make a payment late, what is the amount of the late fee you would pay? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

- ○ [ ]
- ○ I don't know

[Q97] If you made a payment late, what is the interest rate you would pay on new purchases? (If you wish to see first page of the form again, please click here; the second page is here. If the form is too small for comfortable reading, please use your device's controls to zoom in.)

The interest rate I would pay is:

- ○ [ ]
- ○ I don't know

[Q99] Which category or categories in this this do you feel best describe you? You can select more than one.

- ☐ White (including Middle Eastern or Arab)
- ☐ Black/African-American
- ☐ Hispanic/Latine/Latina/o
- ☐ Asian
- ☐ American Indian/Alaska Native
- ☐ Native Hawaiian/Pacific Islander
- ☐ Other

[Q101] If you wish to say more about your answer, you may do so here:

[Q103] Which of these categories best describes your annual combined household income?

- ○ Under $25,000
- ○ $25,000 - $50,000
- ○ $50,001 - $75,000
- ○ $75,001 - $100,000
- ○ Over $100,000

[Q105] What is the credit limit on your primary credit card account (that is, the maximum balance that you are allowed to have at any one time)?

- ○ Under $1,000
- ○ $1,001 to $4,000
- ○ $4,001 to $8,000
- ○ Over $8,000
- ○ I don't know
- ○ I don't have a credit card

[Q107] How long ago did you get your first credit card?

- ○ Less than five years ago
- ○ 5 to 10 years ago
- ○ More than 10 years ago
- ○ I don't know
- ○ I don't have a credit card