CONSUMER BITCREDIT AND FINTECH LENDING

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ABSTRACT

The digital economy is changing everything, including how we borrow money. In the wake of the 2008 crisis, banks pulled back in their lending and, as a result, many consumers and small businesses found themselves unable to access credit. A wave of online firms called fintech lenders have filled the space left vacant by traditional financial institutions. These platforms are fast making antiques out of many mainstream lending practices, such as long paper applications and face-to-face meetings. Instead, through underwriting by automation—utilizing big data (including social media data) and machine learning—loan processing that once took days for mainstream lenders can now be done in minutes by fintech firms. The result of these fintech advances has been quicker access to capital, more economic efficiencies, and even greater prospects for access to credit for the unbanked and underbanked. "Click here" is the new "sign on the dotted line."

But there is a lot still to learn about fintech lending. How do these firms work and what kinds of products do they offer? Moreover, what role will they play in the future of American debt markets, particularly when it comes to the role of machine learning in assessing a borrower's creditworthiness? This Article explores these questions and assesses current government responses to the nascent industry. It also surveys the current consumer protection landscape for fintech lenders and analyzes a multi-year dataset of complaints submitted to the CFPB relative to products offered by these firms. The Article concludes by offering several policy recommendations for how to regulate this new world of bitcredit.

INTRODUCTION

The availability of credit is (and has always been) the cornerstone of the American economy. Our country's leaders have long recognized how important credit is to the health of the nation. "As Senator Daniel Webster suggested over 170 years ago, the urgency for the country to keep afloat its credit system was as much of a concern for national security as it was for the economic health of the nation."

A healthy and energetic credit system turns the wheels of the economy by allowing businesses to provide and acquire a variety of services and goods and by allowing consumers the ability to likewise avail themselves of the same. We can purchase a home typically because we can obtain a mortgage loan. We can acquire a car to drive to work usually because we

^{1.} Costantino Panayides, *The Federal Response to the Credit Crisis*, 28 REV. BANKING & FIN. L. 13 (2008).

can get access to auto financing. Student loans help us gain an education and ultimately a job, and consumer loans help us purchase the things we need and can also help carry us during times of financial hardship. For much of history, the process of obtaining a loan was very much a face-to-face proposition. The borrower usually walked into a brick and mortar building and sat across a desk from a loan officer in a dark suit. The parties discussed the loan, the borrower filled out paperwork, and the lender checked the borrower's credit scores and analyzed the borrower's income, debts, and assets. This process could often take a good bit of time, and frequently the borrower might walk away with nothing due to the bank declining to make the loan at all. Indeed, this narrative has pervaded the lending market for quite some time. Banking is, at its core, quite traditional.

But the rise of the financial tech movement is changing all of that, and fast. Now one does not need a building at all—rather, all one needs is a computer with an internet connection. Credit has gone online. In the wake of the 2008 financial crisis, when lenders pulled back on providing access to credit—particularly to consumers—a new group of lenders stepped into the void: fintech lenders. Fintech lenders (formerly known as peer-to-peer lenders and often called marketplace lenders) pair borrowers and lenders through the use of online platforms, all without the use of a traditional bank intermediary.² And these online platforms are fast making antiques out of many traditional and mainstream lending practices.

The financial technology (called "fintech") sector, the place where these lenders live, has become explosive in recent years. In the first quarter of 2016 alone fintech companies raised nearly \$5 billion from venture capital sources. Investors in fintech companies come from across the globe—ranging from North America, to Europe, to Chinese markets, with familiar names like Goldman Sachs, Societe Generale, JPMorgan Chase & Co., BNP Paribas, and Credit Suisse. Drilling down to fintech lenders specifically, in a series of twenty-six deals companies such as Lu.com, Welab Holdings, and DuanRong raised a collective \$1.8 billion in the mere

^{2.} Angela M. Herrbolt, *Marketplace Lending*, SUPERVISORY INSIGHTS 12–18 (Winter 2015), https://www.fdic.gov/regulations/examinations/supervisory/insights/siwin15/si_winter2015.pdf [hereinafter FDIC Commentary]. In this Article, I refer to marketplace lenders or peer-to-peer lenders as simply fintech lenders.

^{3.} See KPMG, THE PULSE OF FINTECH, Q1 2016 6–8 (2016), https://assets.kpmg.com/content/dam/kpmg/pdf/2016/05/the-pulse-of-fintech.pdf [hereinafter KPMG Report].

^{4.} See id. at 8. Some of the most active venture capital investors in fintech companies during the Q1 2015 to Q1 2016 period are QED Investors, 500 Startups, Khosla Ventures, RRE Ventures, Accel Partners, General Catalyst Partners, Nyca Partners, Route 66 Ventures, Index Ventures, Blockchain Capital, First Round Capital, Bain Capital Ventures, Sequoia Capital, New Enterprise Associates, and East Ventures. See id. at 21.

^{5.} See id. at 6-7, 33.

first three months of 2016 (a massive 37% of all fintech venture capital during that period).⁶

Marketplace lenders are proving popular (both for investors and borrowers) for a number of reasons. These firms can provide borrowers with quicker access to credit, a process that is often slowed by the traditional face-to-face exchange, mailing of documents, or lengthy loan application. Indeed, where the traditional process can take days or weeks, fintech lenders can usually get back to a borrower in forty-eight to seventytwo hours, or less. 8 The loan application is done completely online, and there are no physical retail branch locations. Another benefit that fintech lenders provide is that they can offer short-term, small dollar-value loans something that traditional lenders often find too expensive to be economically viable as short-term financing involves high transaction costs. 10 And lastly, the underwriting process (i.e., the process by which a lender evaluates whether an individual can afford a loan and on what terms) with fintech lenders is completely reimagined in the online setting.¹¹ To be sure, traditional indicators of creditworthiness still play a part—such as income levels, ongoing liabilities, and individual debt-loads—but a number of other, nontraditional factors also inform the lending decision. This includes where borrowers live, what clubs they belong to, their text messaging habits, their health records, and even their social media activity. 12 From the fintech lenders' perspective, the goal is to ease the borrowing process by automating as much of the underwriting procedure as possible and thereby reducing overhead costs while increasing transaction volume. As one online lender noted on its website: "All data is credit data "13

But for all its accomplishments and aspirations, the fintech lending sector is not without major risks. As fintech lender funding has moved

^{6.} See id. at 13.

^{7.} U.S. DEP'T OF TREASURY, OPPORTUNITIES AND CHALLENGES IN ONLINE MARKETPLACE LENDING 5 (2016), https://www.treasury.gov/connect/blog/Documents/Opportunities%20and%20 Challenges%20in%20Online%20Marketplace%20Lending%20vRevised.pdf [hereinafter Treasury Report]. See generally Andrew Verstein, The Misregulation of Person-to-Person Lending, 45 U.C. DAVIS L. REV. 445 (2011) (explaining the early threats to marketplace/fintech lending as a result of action by the Securities and Exchange Commission starting in November 2008 against the firm Prosper).

^{8.} See Treasury Report, supra note 7, at 5.

^{9.} Id.

^{10.} See id.

^{11.} See id.

^{12.} See id.; see also Smittipon Srethapramote et al., Global Marketplace Lending: Disruptive Innovation in Financials 11 (2015), http://bebeez.it/wpcontent/blogs.dir/5825/files/2015/06/GlobalMarketplaceLending.pdf [hereinafter Morgan Stanley Report].

^{13.} See Cathy O'Neil, Weapons of Math Destruction 157 (2016).

"into the mega-deal space," there are significant reasons to be concerned about the regulatory environment in which these companies operate particularly from the standpoint of consumers. 14 The 2008 crash and the chronic growth of the unbanked and underbanked population in the United States has led to an ever-increasing demand for alternative financial services, and fintech lenders are stepping into that void (for good or for bad). 15 This Article explores the burgeoning world of fintech lending—the world of bitcredit as I call it here—and seeks to better understand the promises and perils that these firms present. In order to accomplish such a goal, this Article looks to a sample of consumer complaints submitted to the Consumer Financial Protection Bureau (the CFPB) over a period of five years related to loans obtained by consumers from across the country from a set of major fintech lending firms. Through an analysis of these data and accompanying narratives, in addition to reviewing existing consumeroriented laws and legal regimes, this Article aims to set forth some broad policy prescriptions for how we might regulate the bitcredit marketplace (whether through law or industry guidelines).

Part I explores the contours of fintech lending, discussing the business models that underpin the industry, new approaches to how these companies make money, and the sector's major players. Part II then discusses why fintech lending is currently on the rise and specifically describes the types of financial products that the firms that operate in this space offer to consumers and small business borrowers. With that background, Part III then analyzes how existing law and policy deal with fintech lending by explaining current government responses to the nascent sector, as well as by examining how present legal regimes (ranging from disclosures to information privacy to fair lending) are implicated. Part IV then analyzes a dataset of consumer complaints related to online loans made by the industry's major firms over a five-year period. In doing so, this Part identifies the most prevalent issues across the online credit marketplace and uses the narratives submitted by consumers to better understand the reallife experiences of those who turn to fintech lending for access to credit. Finally, Part V offers a number of policy concerns and accompanying recommendations for how any future regulatory or industry-lead environment should be crafted for the bitcredit economy.

^{14.} See KPMG Report, supra note 3, at 15.

^{15.} See Mehrsa Baradaran, How the Other Half Banks: Exclusion, Exploitation, and the Threat to Democracy ch. 5 (2015); see also KPMG Report, supra note 3, at 40.

I. WHAT IS FINTECH LENDING?

The fintech lending sector is interesting because it is both incredibly different from traditional banking environments (no building, no tellers, no waiting rooms) and also strikingly similar (the money has to come from somewhere: investors, securitization, underwriting). Indeed, it is the blending of new and old lending concepts that simultaneously makes regulating the internet of fintech lending credit both important and difficult.

With traditional bank lending, the bank acts as an intermediary between depositors and borrowers. 16 The bank lends money deposited at the bank to borrowers and then pays interest to bank customers on their deposits in return.¹⁷ Income for the bank is generated by assuming risk on loans they make and then managing the spread between the interest they must pay to depositors on their savings on the one hand and the interest that borrowers pay on the loans on the other. 18 Since the bank takes on risk, it must maintain a certain level of capital to absorb any adverse economic or credit events. 19

Fintech lenders (or "platform" lenders as they are sometimes called), on the other hand, more directly match investors and borrowers.²⁰ They also (despite their name) do not lend money themselves.²¹ Rather, funds are advanced by investors or by a partner-bank.²² Because of this, fintech lenders do not hold any capital reserves because they maintain no risk.²³ Income for fintech lenders is not derived from interest rate spreads, but rather through commissions and fees that they collect from helping originate loans or for servicing them thereafter.²⁴ And lastly (and perhaps most importantly) fintech lenders utilize not only traditional methods of underwriting (such as FICO scores²⁵), but also highly sophisticated

^{16.} DELOITTE, A TEMPORARY PHENOMENON? MARKETPLACE LENDING: AN ANALYSIS OF THE UK MARKET 4 (2016), https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/financialservices/deloitte-uk-fs-marketplace-lending.pdf [hereinafter Deloitte Report].

^{17.} See id.

^{18.} *Id*.

^{19.} See id.

^{20.} Id.

^{21.} Id.

^{22.} See id.

^{23.} Id.

^{24.} See id.

^{25.} THOMAS P. LEMKE, GERALD T. LINS & MARIE E. PICARD, MORTGAGE-BACKED SECURITIES § 3:6 (2017–2018 ed. 2017). The word FICO is an abbreviation for the "Fair Isaac Corporation," which is the company that created method of taking consumer credit reports (produced by companies like TransUnion, Equifax, and Experian) and turning that information into a score that reflects an individual's creditworthiness. See id. The FICO method assigns certain percentage weights to different types of information from a consumer's credit profile. Id. Specifically, payment history accounts for about 35%, the consumer debt of the individual is about 30%, the duration of a person's credit history is another 15%, and finally the different types of credit that the individual used or acquired over time is

mathematical and machine learning processes in order to ascertain the creditworthiness of potential borrowers.²⁶ In order to gain a better understanding of the challenges and the necessity of defining a regulatory or industry-driven scheme for these new firms, the following sections give an overview of fintech lending's business models and products, as well as put their rise in the context of the current credit environment.²⁷

A. Basic Business Models

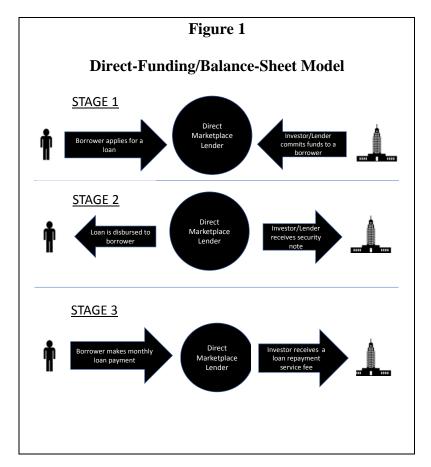
The online marketplace started as what some call "peer-to-peer" lending.²⁸ Under this setup, fintech lenders basically served as middlemen—connecting investors with cash to borrowers in need of it.²⁹ But that simplicity did not last for long. Soon these firms (now called marketplace lenders) opened their fund sources to institutional investors—large financial institutions and hedge funds that were seeking better yields and that had become more comfortable with online marketplaces.³⁰ Today, these online companies are known simply as "fintech lenders," which is how they are described in this Article.³¹

The business model for fintech lenders generally bifurcates the industry broadly into two general categories. First are what have been called "balance-sheet lenders" or "direct funding lenders." These are online

about 10%. See id. Using this formula, FICO assigns the person a score anywhere from 300 to 850. Id. Individuals who are offered so-called "subprime loans" generally have scores below 660, and those who are offered "prime loans" have scores above 700. See id.

- 26. See id.
- 27. KPMG Report, supra note 3, at 40.
- 28. See FDIC Commentary, supra note 2 at 13; see also Deloitte Report, supra note 16 (for a discussion of early peer-to-peer lending in the United Kingdom with perspectives on U.S. counterparts). Although one cannot be certain, potential predecessors to the peer-to-peer lenders (or at least firms that developed alongside them) are those offering so-called income-sharing agreements (ISAs), such as Fantex, Upstart, and Pave. See Shu-Yi Oei & Diane Ring, Human Equity? Regulating the New Income Share Agreements, 68 VAND, L. REV. 681 (2015).
- 29. FDIC Commentary, *supra* note 2, at 13; *see also* CHAPMAN & CUTLER LLP, THE REGULATION OF MARKETPLACE LENDING: A SUMMARY OF THE PRINCIPAL ISSUES (2016 UPDATE) 10–11 (2016) [hereinafter Chapman & Cutler Report] (describing the process of funding a peer-to-peer loan)
- 30. KPMG Report, *supra* note 3, at 5; *see also* Morgan Stanley Report, *supra* note 12, at 6 ("The general credit environment has been benign, which has helped marketplace platforms establish credibility with potential investors in loans.").
- Financial Inclusion, Risk Pricing, and Alternative Information 1–3 (June 16, 2017), https://www.fdic.gov/bank/analytical/cfr/bank-research-conference/annual-17th/papers/14-jagtiani.pdf. See generally Examining Opportunities and Challenges in the Financial Technology ("Fintech") Marketplace: Hearing Before the Subcomm. on Fin. Insts. and Consumer Credit of the H. Comm. on Fin. Servs., 116th Cong. (Jan. 30, 2018) (written testimony of Adam J. Levitin, Professor of Law, Georgetown University Law Center), https://financialservices.house.gov/uploadedfiles/hhrg-115-ba15-wstate-alevitin-20180130.pdf (describing fintech credit firms and marketplace lending).
- 32. KPMG Report, *supra* note 3, at 40. These lenders are said to utilize the "direct funding model." *See* FDIC Commentary, *supra* note 2, at 13.

companies that originate loans in-house and make them directly to borrowers.³³ These lenders keep the loans on their books until the debt is retired. Balance-sheet lenders often obtain the funds to make these loans from their own borrowed capital or from outside investors.³⁴ Figure 1 below depicts the balance-sheet or what is sometimes called the "direct funding" model.



The second group of fintech lenders—and the one that is fast growing—is called intermediary lenders, which enter into legal relationships with third-party financial institutions.³⁵ These third-party

^{33.} KPMG Report, supra note 3, at 5-6.

^{34.} See id.

^{35.} See id. at 6–8; see also KPMG Report, supra note 3, at 2 ("Over the quarter, we saw continued collaboration between the fintech sector and corporate players, with an increasing number of banks, financial institutions and insurance companies forging partnerships with fintech companies, accelerators and incubators in order to drive innovation within their own organizations."); RYAN M. NASH & ERIC BEARDSLEY, GOLDMAN SACHS EQUITY RESEARCH: THE FUTURE OF FINANCE – THE RISE

financial institutions are then the ones to make the loans to the borrowers.³⁶ A description of the steps in the borrowing process with intermediary fintech lenders is helpful here: borrowers access the lender's online platform, enter information about themselves³⁷ and the credit product they desire, and are then connected to the financial institution that ultimately advances the funds.³⁸ All underwriting and processing of the loan application, however, is done by the fintech lender (through their algorithmic/machine learning underwriting).³⁹ The financial institution partner, however, does not keep the loan on its balance sheet for long.⁴⁰ Shortly after the origination, the loan is either sold to the fintech lender itself, or to an investor, with the platform facilitating the transaction.⁴¹ Obviously, the fintech lender needs capital to purchase the loans originated by the financial institution. This money comes from platform investors who put money into the platform and, in exchange for putting up the purchase money, receive security-like instruments called "member payment dependent notes" or "platform notes" that entitle them to the interest and principal payments made by borrowers on these loans. 42 As one might imagine, both the promissory note signed by the borrower and the platform notes are electronic—there is no paper. 43 An electronic ledger maintains a record of the ownership of the platform notes by the investors. 44 The fintech lender, of course, does not do all this investment facilitation for free. It charges a fee or commission for arranging the deal and servicing the loan, which is drawn from the periodic payments made by the borrowers.⁴⁵

Figure 2 depicts this intermediary structure, which is also sometimes called the "bank-partnership model."

OF THE NEW SHADOW BANK 9 (2015), http://www.betandbetter.com/photos_forum/1425585417.pdf [hereinafter Goldman Sachs Report] ("To facilitate the origination of loans and compliance with bank regulations, many P2P lenders partner with little known WebBank, for instance, a Salt Lake City, Utah based industrial bank. WebBank was founded in 1997, has about 38 full time employees, and in 2014 ranked in the 99th percentile for bank profitability per head (\$420k of net income/head)."). Lenders in this category are said to use the "bank partnership model." See FDIC Commentary, supra note 2, at 13.

^{36.} See FDIC Commentary, supra note 2, at 13.

^{37.} Chapman & Cutler Report, *supra* note 29, at 10 ("Each borrower must disclose or make available... certain financial and other information including, among other items, the borrower's credit score (as determined by a credit reporting agency), self-reported income range, debt-to-income ratio, employment status, homeownership status, number of existing credit lines, intended use of funds and number and/or amount of recent payment defaults and delinquencies.").

^{38.} See Treasury Report, supra note 7, at 6–8.

^{39.} Id. at 9.

^{40.} See id.

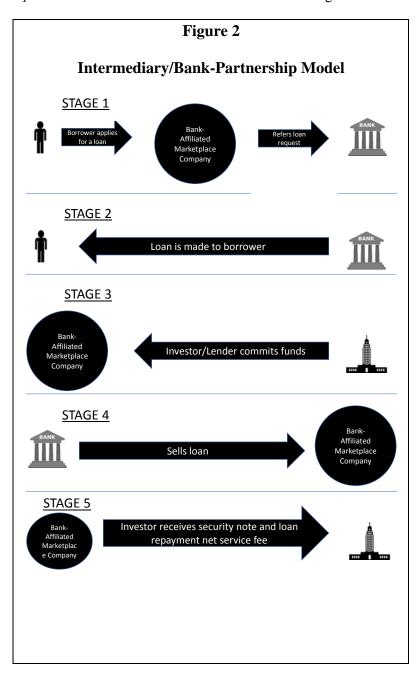
^{41.} See id. at 6

^{42.} See id.; see also Chapman & Cutler Report, supra note 29, at 11–12.

^{43.} Chapman & Cutler Report, supra note 29, at 12.

^{44.} See id.

^{45.} Treasury Report, supra note 7, at 6–8; see also FDIC Commentary, supra note 2, at 14.



An example may help put this process into focus. Consider the following facts as to the basic workings of an online loan from a fintech lender using the bank-partnership model: Borrowers go to www.FintechLoans.com, owned and operated by the fintech lending

platform company OnlineLoans, Inc. OnlineLoans, Inc. has a business agreement with First Bank. Borrowers click through the online application, answering questions and filling in information screen-by-screen. Once the application is submitted, the platform's mathematical algorithm goes to work assessing the borrowers' creditworthiness by combining the information submitted by the borrowers with other data pulled from thirdparty sources and processing it through the entity's proprietary underwriting algorithm. 46 Once the loan is approved and the terms solidified, First Bank has the funds deposited into the borrowers' accounts directly. First Bank keeps the loans for about two to three days, and then it sells them to OnlineLoans, Inc. at a discounted rate.⁴⁷ OnlineLoans, Inc. is able to purchase these loans (and others in a bundle) because it has obtained investment capital from Hedge Fund, Venture Capital Fund, and Institutional Investor. Once OnlineLoans, Inc. has purchased the loans from First Bank, it then issues securities (in the form of member-paymentdependent notes or platform notes) to Hedge Fund, Venture Capital Fund, and Institutional Investor. These investors, in turn, obtain a return on their investment in the form of the payments made by borrowers (and other borrowers in the bundle) over the life of the loan.

It is worth noting that the platform does not actually retain any credit risk in this arrangement—something that raises serious concerns.⁴⁸ It purchases the loans from the partner-originating bank (First Bank in the hypo above), but it does so with the investors' capital.⁴⁹ It is the investors who, through their ownership of the platform notes, bear the risk that the online borrowers will default.⁵⁰ And because of this lack of risk, fintech lenders need not keep capital reserves to insure their investors against a default. For instance, one well-known fintech lender—Lending Club—was reported to have held right under 2% of tangible equity against its loan receivables, compared to the 14–15% required of credit card companies.⁵¹ Without a doubt, a major advantage to fintech lending firms is that they are not constrained by capital requirements imposed on traditional lenders.⁵² As a result, fintech lenders can, at least in theory, offer lower interest rates on their products (particularly consumer credit products)—something

^{46.} See FDIC Commentary, supra note 2, at 12 ("Credit grades are assigned based on the marketplace lending company's unique scoring algorithm, which often gives consideration to a borrower's credit score, debt-to-income ratio, income, and other factors set by the marketplace lender.").

^{47.} *See id.* at 14 ("The partner bank typically holds the loan on its books for 2-3 days before selling it to the bank-affiliated marketplace company.").

^{48.} Treasury Report, supra note 7, at 6-8.

^{49.} Id. at 6.

^{50.} See id.

^{51.} Goldman Sachs Report, supra note 35, at 17.

^{52.} See Morgan Stanley Report, supra note 12, at 12.

borrowers look for when shopping for a loan.⁵³ The fintech lender called Lending Club reports that its customers enjoy interest rates that are lower than traditional consumer loans.⁵⁴ The firm SoFi, which specializes in refinancing student loan debt, asserts that their borrowers save about \$14,000 in interest payments when they refinance with a SoFi loan product.⁵⁵ However, in the report from the Treasury that surveys the industry broadly, at least some fintech lenders appear to be charging higher interest rates on consumer loans than what one would pay with a normal credit card.⁵⁶ For instance, Avant and Lending Club's annual rates on consumer loans range from an average of 8%–36% while the APR for a traditional credit card is between 12% and 12.22% and a traditional consumer bank loan is between 9.66% and 9.85%.⁵⁷ Thus, depending on the underwriting determinations of the fintech lender, the cost of the loan can range dramatically.

Another important aspect of the bank-partnership model is the ability of these loans to include an interest rate that is exempt from state usury laws. In general, state usury laws prohibit certain loans from containing an interest rate that exceeds certain statutory maximums.⁵⁸ If a lender makes a loan that exceeds the usury cap for interest rates, then the firm risks forfeiting all future interest, as well as paying damages and returning all previously paid interest to the borrower.⁵⁹ Sometimes a usurious interest rate can even result in criminal penalties.⁶⁰ The National Bank Act (NBA), however, exempts national banks from state usury laws under the preemption doctrine.⁶¹ Therefore, a national bank is free to make a loan that violates a state usury law without worrying about any adverse legal consequences. This ability to avoid state laws is important in the fintech lending context. As noted above, many fintech lenders partner with nationally chartered commercial banks in making loans, and those national

See id.

^{54.} Nick Clements, Marketplace Lenders Focus on Cheaper Loans, Less Credit Card Debt and Stronger Values, FORBES (Sept. 2, 2015, 7:03 PM), https://www.forbes.com/sites/nickclements/2015/09/02/marketplace-lenders-focus-on-cheaper-loans-less-credit-card-debt-and-stronger-values/#35762b013ac2.

^{55.} See id.

^{56.} See Treasury Report, supra note 7, at 10.

^{57.} See id.

^{58.} Summary of Maximum Permissible Rates Under State Usury Laws (March, 2010), AM. LAWS. Q., http://alqlist.com/InterestRateSummary.html (last visited Mar. 25, 2018).

^{59.} See generally Allen Dale Darden, The Penalty for Usury – An Interesting Problem, 44 LA. L. REV. 1067 (1984).

^{60.} See, e.g., N.Y. PENAL LAW §§ 190.40, 42.2 (McKinney 2010).

^{61.} Marquette Nat'l Bank v. First of Omaha Serv. Corp., 439 U.S. 299 (1978); see also Farmers' & Mechs.' Nat'l Bank v. Dearing, 91 U.S. 29 (1875) (holding that the National Bank Act preempts state usury law remedies); Easton v. Iowa, 188 U.S. 220 (1903); Tiffany v. Nat'l Bank of Mo., 85 U.S. 409 (1874).

banks rely upon the NBA's preemption principle to offer loans that exceed state usury limits.⁶² Although the loan is eventually sold to the fintech lender, it is initially made by the national bank itself, thereby arguably avoiding state usury caps.

A recent decision calls into question the scope of NBA preemption. On May 22, 2015, the Second Circuit ruled in Madden v. Midland Funding, LLC that a debt collector that tried to collect on a loan at a usurious interest rate, but acquired that loan from a national bank, was nevertheless subject to state usury laws. 63 The court reasoned that although the NBA's preemption principle had been applied to nonnational bank entities in the past, such cases were limited to instances where the nonnational bank entity "has exercised the powers of a national bank—i.e., has acted on behalf of a national bank in carrying out the national bank's business."⁶⁴ In Madden, the court noted that the debt collector "did not act on behalf of [Bank of America] or [FIA Card Services, N.A.] in attempting to collect on Madden's debt. The defendants acted solely on their own behalves, as the owners of the debt."65 Furthermore, the court stated that "extending [NBA] protections to third parties would create an end-run around usury laws for non-national bank entities that are not acting on behalf of a national bank."66

Under the rationale of *Madden*, fintech lenders who acquire loans originated by national banks cannot shield themselves from state usury laws by claiming NBA protection. Much like the debt collector's situation in *Madden*, any action taken by the fintech lender to collect on a loan would be solely on its own behalf and not on behalf of the originating bank. There are, however, some limitations to *Madden*. It is only a decision of the Second Circuit and, therefore, only has an impact on states in that circuit (Connecticut, New York, and Vermont). But, that being said, on June 27, 2016 the U.S. Supreme Court denied cert on the *Madden* case, thereby intimating that it agrees with the Second Circuit in that this might be the correct interpretation of the NBA. ⁶⁷ Indeed, some investors in fintech loans

^{62.} Chapman & Cutler Report, *supra* note 29, at 1–2.

^{63. 786} F.3d 246 (2d Cir. 2015). The interest rate that the debt collector sought to enforce was an annualized rate of 27%. *See id.* at 248.

^{64.} Id. at 251.

^{65.} See id.

^{66.} Id.

^{67.} Midland Funding, LLC v. Madden, 136 S. Ct. 2505 (2016) ("Petition for writ of certiorari to the United States Court of Appeals for the Second Circuit denied."). The Second Circuit also previously denied a request for a rehearing en banc in August 2015. See Thomas Pinder, Second Circuit Denies Rehearing in Third Party Debt Collector Preemption Case, AM. BANKERS ASS'N BANKING J. (Aug. 12, 2015), https://bankingjournal.aba.com/2015/08/second-circuit-denies-rehearing-in-third-party-debt-collector-preemption-case/.

"have limited eligibility criteria to loans which comply with applicable usury rates in the Second Circuit." ⁶⁸

WebBank, which is the national bank partner of choice for the major fintech lender Lending Club, now provides in its loan documents that the bank must maintain an account relationship with borrowers throughout the life of their loans. ⁶⁹ Also, WebBank and Lending Club now provide in their agreement that the commissions earned by WebBank for originating loans are paid over time from the proceeds of borrowers' loan payments, rather than being paid up front at the time of origination. ⁷⁰ Both maneuvers are attempts by WebBank and Lending Club to try to maintain the NBA's usury preemption shield and avoid the rule in *Madden*. ⁷¹

Lastly, many platform and balance-sheet fintech lenders have started to look to securitization⁷² as a method of raising investor capital and spreading credit risk.⁷³ This is yet another mechanism whereby fintech lenders can facilitate the availability of credit, while pushing off the risk of default to third parties who have a higher tolerance for risk in exchange for greater yields.⁷⁴ As of the fourth quarter of 2015, there had been about forty securitizations of fintech loans.⁷⁵ National ratings agencies have scored some of the securities backed by these fintech loans.⁷⁶

B. Emerging Industry Approaches

Fintech lending cannot be easily summed up. Indeed, fintech lenders have proven to be quite nimble in adapting to changing economic conditions. While the balance-sheet and intermediary lending models discussed above provide the basics, many companies are starting to break into new lines of business or adopt new approaches to these models. For instance, some balance-sheet lenders are selling a portion of their loans to third-party investors (thus removing the assets from their balance sheets) but are at the same time entering into agreements with these buyers that

^{68.} See Chapman & Cutler Report, supra note 29, at 2.

^{69.} See id. at 3 n.7.

^{70.} Id.

^{71.} See id.

^{72.} See generally STEVEN L. SCHWARCZ, STRUCTURED FINANCE: A GUIDE TO THE PRINCIPLES OF ASSET SECURITIZATION (3d ed. 2004) (explaining in detail the securitization process).

^{73.} Treasury Report, supra note 7, at 6.

^{74.} See id.

^{75.} See Deloitte Report, supra note 16, at 6.

^{76.} See id.; see also Moody's: Underwriting of Marketplace Consumer Lending Platforms is Untested Through Stressed Economic Cycles and Poses Unique Credit Risks, MOODY'S INV. SERV. (Mar. 17, 2016), https://www.moodys.com/research/Moodys-Underwriting-of-marketplace-consumer-lending-platforms-is-untested-through—PR 345795.

allow the fintech lender to service the loans.⁷⁷ Thus, although the investor-buyer becomes the owner of the debt, the fintech lender still monitors the loan's performance, collects payments on the investor-buyer's behalf, and interacts with borrowers as occasion merits.⁷⁸ The fintech lender is paid lucrative fees by the investors on an ongoing basis for providing these services.⁷⁹

In another variation involving intermediary lenders, instead of paying the full purchase price for the loans acquired from the partner-bank at the time of the purchase, some transactions are structured such that the fintech lender can defer making payment. Instead, the fintech lender's obligation to pay the partner-bank is tied to how the loans perform. In this way, the originating bank maintains some skin in the game and, thus, has reason to be more concerned with the credit health of the borrower.

Traditional lending institutions have incentives to participate with fintech lenders and vice versa. For instance, fintech lenders can take advantage of the regulatory benefits that are bestowed on nationally chartered banks, such as access to cheap money and insulation from some state regulatory interference. Conversely, banks are eager to take advantage of the technological advances that fintech lenders and other fintech companies offer—advances that can lead to efficiencies, lower transaction costs, simplification of processes, and ultimately higher profits. At Rather than trying to build the technology themselves or purchase a fintech company to hold as a subsidiary, partnering with an existing fintech company can make sense from an economic standpoint, as well as promise future advantages by achieving synergies without having to become too closely intertwined. And while some larger banks might see the growth of fintech lenders as a threat to their share of the consumer debt market, small and midsized lending institutions (which have been losing

^{77.} Treasury Report, supra note 7, at 8.

^{78.} *Id*.

^{79.} *Id*.

^{80.} See id.

^{81.} *Id*.

^{82.} See id.

^{83.} See generally Rory Van Loo, Making Innovation More Competitive: The Case of Fintech, 65 UCLA L. REV. (forthcoming 2018) (discussing, among other things, the regulatory barriers to entry for fintech firms).

^{84.} See KPMG Report, supra note 3, at 10; see, e.g., Nick Clements, Lending Club Reports Profitability and Exponential Loan Growth, FORBES (Oct. 30, 2015), https://www.forbes.com/sites/nickclements/2015/10/30/lending-club-reports-profitability-and-exponential-loan-growth/#79af4152144e (discussing the firms' EBITDA of \$21.2 million and profit before taxes of \$950,000).

^{85.} KPMG Report, *supra* note 3, at 10 ("Globally, banks and other financial institutions are becoming more collaborative.... Many banks are coming to realize the benefits of collaborative models.").

market share to larger banks over the past ten years) are said to have much to gain from these partnerships. Be Upper management officials at Citigroup and Morgan Stanley now serve on the corporate boards of a number of fintech lenders, and an investment fund of Wells Fargo is the largest stakeholder in the fintech lender Lending Club. Moreover, some banks have moved from merely serving as lenders that are matched with borrowers through online platforms to being the actual platform investors. Smaller banks have found that funding online fintech platforms with customer-deposit accounts can serve as a high-yield investment.

C. Meeting the Players

A few facts about the players in this emerging field of fintech lending are worth mentioning. First, as noted above, the market is relatively new. Jackson Mueller at the Milken Institute did a study of seventy fintech lending companies (predominately located in the United States) that provide credit to small businesses and consumers. He noted that over half of these companies were launched between 2012 and 2014. Mueller also found that most of the industry players are geographically located in fintech hotspots like California, Colorado, Texas, and New York. In fact, in his company sample, three-fourths were located in either California or New York.

At this nascent stage, the industry has moved quickly to get ahead of regulators, policy makers, and the public—all of whom are beginning to form opinions about what fintech lending will mean for the future. A number of industry trade associations and advocacy groups were formed in late 2015 through 2016 to advance the interests of the fintech lending economy. Groups like the Small Business Finance Association (established in April 2015) and the Innovative Lending Platform Association (established in May 2016) provide best practices guidelines for fintech lenders. The Responsible Business Lending Coalition (created in August 2015) advocates for responsible practices in small business lending.

^{86.} See Morgan Stanley Report, supra note 12, at 10.

^{87.} O'NEIL, supra note 13, at 158.

^{88.} See Morgan Stanley Report, supra note 12, at 11.

^{89.} *Id*.

^{90.} Jackson Mueller, *U.S. Online, Non-Bank Finance Landscape*, FINTECH IN FOCUS (Milken Inst. Ctr. for Fin. Mkts.), May 2016, at 3, http://www.milkeninstitute.org/assets/PDF/Online-Non-Bank-Finance-Landscape.pdf [hereinafter Milken Report].

^{91.} See id.

^{92.} See id. at 4-5.

^{93.} *Id*.

^{94.} Id. at 5-6.

^{95.} See id.

while the Coalition for Responsible Business Finance (started in March 2016) engages with and educates federal regulators on how the fintech lending industry operates.⁹⁶

The first U.S. fintech lender was Prosper Marketplace, Inc. (founded in 2005). The utilized the peer-to-peer model as described previously. Prosper experienced some early difficulties. It had to shut down its platform in 2008 in order to properly register with the Securities and Exchange Commission. Later, Prosper experienced some significant defaults between 2010 and 2012, which spooked investors and caused investment capital to flee from the platform. Prosper was again in the news in 2015 when it was discovered that the lender had made a loan of \$28,500 to Syed Rizwan Farook, who was one of the shooters in the San Bernardino killings in early December of that year. 102

In 2006, Lending Club set up its headquarters in San Francisco and initially appeared only as an app on Facebook. ¹⁰³ Unlike Prosper, which remained private, Lending Club went public in December 2014. ¹⁰⁴ In 2014, most of the loans issued by both Lending Club and Prosper were consumer loans (unsecured by any property of the debtor) and were mostly used to consolidate or refinance existing debt. ¹⁰⁵ Lending Club has recently started to extend its offerings from just general consumer loans to specifically education and healthcare-related credit. ¹⁰⁶

In the realm of small business lending, OnDeck, launched in 2006 and headquartered in New York, was one of the first in this space. ¹⁰⁷ OnDeck has used a variety of funding models, including securitization, to raise capital. ¹⁰⁸ It was followed in 2009 by Kabbage, which initially used UPS and FedEx delivery data to offer small business loans but has broken into

^{96.} Id.

^{97.} See Goldman Sachs Report, supra note 35, at 12.

⁹⁸ See id.

^{99.} Morgan Stanley Report, supra note 12, at 35.

^{100.} See id.; see also Verstein, supra note 7, at 475–76 ("Soon after Prosper's . . . 2006 launch, it requested a no-action letter from the SEC, seeking confirmation of its legal structure and business model. . . . On November 24, 2008, the SEC issued a Cease and Desist Order to Prosper. . . . The SEC argued that Prosper was selling securities....").

^{101.} Morgan Stanley Report, supra note 12, at 35.

^{102.} Michael Erman, *Online Lender Prosper Made \$28,500 Loan to California Shooter: Source*, REUTERS, Dec. 8, 2015, https://www.reuters.com/article/us-california-shooting-prosper/online-lender-prosper-made-28500-loan-to-california-shooter-source-idUSKBN0TR2AQ20151208.

^{103.} Id.

^{104.} See Goldman Sachs Report, supra note 35, at 12.

^{105.} Id. at 14.

^{106.} Morgan Stanley Report, *supra* note 12, at 35.

^{107.} Goldman Sachs Report, *supra* note 35, at 23.

^{108.} See Morgan Stanley Report, supra note 12, at 36.

consumer lending of late. 109 While traditional lenders have typically found small dollar loans—which are most in demand among small and medium-sized business borrowers—to be too expensive to underwrite, Kabbage and OnDeck utilize sophisticated algorithms and big data to cut away at underwriting costs. 110 Similarly, Square Capital, launched in 2009 and widely known for its payment software, provides cash advance loans to small business merchants. 111 The company analyzes credit card sales data to decide how much money to loan to the merchant borrower. 112 Small businesses use these loans from fintech lenders for a variety of purposes—such as to keep cash on hand for operating needs; to hire new employees; to acquire inventory, equipment, and other assets; and to expand the business. 113

SoFi, a private company, came on board in 2011.¹¹⁴ The firm initially limited itself to refinancing the student debt of people who attended highly ranked colleges and universities, but soon branched out to refinancing mortgage loans and unsecured consumer debt as well.¹¹⁵ On average, the company states that it is doing well—as of May 2015, SoFi reported only two defaults, both caused by the death of the borrower.¹¹⁶

Additional entrants to the fintech lending sector include companies such as Avant and LendUp, which both focus on a narrower slice of the larger credit pie. LendUp asserts that it advances credit to those "that banks won't approve." Avant, launched in 2012, focuses on what it describes as "middle income" borrowers. The company is managed by a former payday lending executive with a background in making loans to individuals with weak credit profiles. Fintech lenders are also beginning to move into auto loans, mortgages, and healthcare credit.

^{109.} Id.

^{110.} Goldman Sachs Report, *supra* note 35, at 23 ("Currently small businesses have very low loan approval rates... over 50% of the time small businesses receive none of the financing they apply for."); *see id.* at 30.

^{111.} See Morgan Stanley Report, supra note 12, at 36.

^{112.} Id.

^{113.} Goldman Sachs Report, *supra* note 35, at 30.

^{114.} Morgan Stanley Report, supra note 12, at 35–36.

^{115.} See id.

^{116.} Id. at 36.

^{117.} See Morgan Stanley Report, supra note 12, at 6.

^{118.} About LendUp, LENDUP, https://www.lendup.com/about (last visited Aug. 26, 2017) ("We believe access to quality credit is a right for everyone.").

^{119.} Morgan Stanley Report, supra note 12, at 36.

^{120.} Id.

^{121.} Id.

II. HOW AND WHY IS FINTECH LENDING ON THE RISE?

Another important aspect of understanding the bitcredit marketplace (where bits and bytes determine one's creditworthiness) is to know why these firms are cropping up now. Similarly, understanding the timing of their appearance on the scene is key to appreciating the types of credit products these platforms are offering borrowers. The following sections discuss the important lessons that can and should be gleaned from the rise of the fintech lending industry regarding access to credit.

A. Why Now?

The rise in fintech lending can be traced directly to the 2008 financial crisis. ¹²² After the crash, access to credit tightened significantly. ¹²³ Banks and other financial institutions became hesitant to loan money—to consumers and small businesses alike. ¹²⁴ For instance, between the mid-1990s and 2012 the total share of bank loans made to small businesses went from 50% to a mere 30%. ¹²⁵ In 2011, small business borrowing was scant—about 8,000 small businesses were denied loans daily. ¹²⁶ Consumer finance did not fare much better. Loans to consumers by banks between 2007 and 2014 dropped 2% each quarter, and credit card lending by banks sunk 0.7% per quarter. ¹²⁷ Simply put, substantial credit losses in the aftermath of 2008 caused various major financial institutions to back away from granting certain loans—many of which are important to small businesses and consumers. ¹²⁸

^{122.} See generally Treasury Report, supra note 7, at 3–4; Milken Report, supra note 90, at 2.

^{123.} See Milken Report, supra note 90, at 2; Victoria Ivashina & David Scharfstein, Bank Lending During the Financial Crisis of 2008, 97 J. OF FIN. ECON. 319 (2010) (describing the supply of credit to the corporate sector as a result of the 2008 crash); Ari Aisen & Michael Franken, Bank Credit During the 2008 Financial Crisis: A Cross-Country Comparison 3 (Int'l Monetary Fund, Working Paper No. 10/47, 2010), https://www.imf.org/external/pubs/ft/wo/2010/wp1047.pdf. ("Rarely an episode of financial turmoil—at least in the post—World War II era—generated such economic havoc as the 2008 financial crisis. The crisis was unique in terms of the wealth destruction, estimated at US\$ 50 trillion [sic] equivalent to one year of world GDP, associated with the plunge in the value of stocks, bonds, property, and other assets. Moreover, the crisis was unprecedented in its global scale and severity, hindering credit access to businesses, households and banks, and choking economic activity.").

^{124.} See Aisen & Franken, supra note 123, at 3.

^{125.} Milken Report, *supra* note 90, at 2; *see also* Karen Mills & Brayden McCarthy, *The State of Small Business Lending: Credit Access During the Recovery and How Technology May Change the Game* (Harv. Bus. Sch. Gen. Mgmt. Unit, Working Paper No. 15-004, 2014), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2470523.

^{126.} Milken Report, supra note 90, at 2 (quoting U.S. Treasury Secretary Jacob Lew).

^{127.} See id.; see also Yuliya Demyanyk & Daniel Kolliner, Peer-to-Peer Lending is Poised to Grow, FED. RES. BANK OF CLEVELAND (Aug. 14, 2014), https://www.clevelandfed.org/newsroom-and-events/publications/economic-trends/2014-economic-trends/et-20140814-peer-to-peer-lending-is-poised-to-grow.aspx.

^{128.} Morgan Stanley Report, supra note 12, at 6.

Moreover, in the wake of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Dodd-Frank Act), as well as other new financial services regulations, lenders have come under much greater regulatory scrutiny. 129 Under the vigilant eye of watchdog government agencies like the CFPB, financial institutions are more conservative as to whom they are willing to extend credit. 130 Financial services industry players note that increases in regulatory oversight have brought about two major shifts in the market. 131 First, they have made the "cost of doing business" for many of these firms more expensive. 132 This has resulted in many traditional financial institutions downsizing or even closing up shop. 133 In fact, a number of large U.S. financial institutions (such as Wells Fargo, Bank of America, Citigroup, and JPMorgan Chase) have shut down non-core lines of business in the face of significant mortgage-related litigation and regulatory expenses. 134 Community banks in particular have faced a number of closures and mergers as a result of their inability to survive in this new regulatory ecosystem. 135 Second, it has caused financial institutions to "reprice" their products and services to take into account higher underwriting or compliance costs. 136 As the cost of credit goes up, many consumers and small businesses are priced out and need to turn to other avenues to access capital. 137 Lastly, with the economy stagnant or

- 132 See id
- 133. Id.
- 134. See id. at 9

^{129.} Goldman Sachs Report, supra note 35, at 5.

^{130.} See Christopher K. Odinet, The Unfinished Business of Dodd-Frank: Reforming the Mortgage Contract, 69 SMU L. REV. 653, 670–76 (2016) (showing data indicating the total share of new residential mortgage loan originations that meet the heightened underwriting criteria of the "qualified mortgage" remains significantly high) [hereinafter Odinet, Mortgage Contract]; see also Milken Report, supra note 90, at 2.

^{131.} See Goldman Sachs Report, supra note 35, at 7.

^{135.} Marshall Lux & Robert Greene, *Dodd-Frank Is Hurting Community Banks*, N.Y. TIMES (Apr. 14, 2016), https://www.nytimes.com/roomfordebate/2016/04/14/has-dodd-frank-eliminated-the-dangers-in-the-banking-system/dodd-frank-is-hurting-community-banks ("The number of community banks (those with less than \$10 billion in assets) shrank 14 percent between Dodd-Frank's passage in 2010 and late 2014."); *see also* Hester Peirce & Stephen Matteo Miller, *Small Banks by the Numbers*, 2000–2014, MERCATUS CTR. (Mar. 17. 2015), https://www.mercatus.org/publication/small-banks-numbers-2000-2014; *cf.* WHITE HOUSE COUNCIL OF ECON. ADVISORS, THE PERFORMANCE OF COMMUNITY BANKS OVER TIME 2 (2016), https://www.whitehouse.gov/sites/default/files/page/files/20160810_cea_community_banks.pdf ("There is no evidence that Dodd-Frank has led to a decline in access to banks across counties. Although the number of bank offices per county has declined since its height during the real estate boom and bust in 2006-2011, it is higher than levels prior to that period. Nearly every county has a bank office, something that has not changed since 2010, with community banks playing an important role.").

^{136.} Goldman Sachs Report, *supra* note 35, at 7.

^{137.} See Daniel Indiviglio, Why Is Consumer Credit Still So Expensive?, ATLANTIC (Sept. 23, 2010), https://www.theatlantic.com/business/archive/2010/09/why-is-consumer-credit-still-so-expensive/63442/ (arguing that regulatory controls that prevent high fees on credit cards has resulted in banks turning to higher interest rates to make up the difference). In 2017, some of the pricing out of consumers is a result of the rise in interest rates at the direction of the Federal Reserve. See Paul

only recovering at an anemic pace, there has been little appetite to deploy capital. The confluence of these factors has created a major capital-access gap. One market group pegged the credit-access deficit to be somewhere between \$44 and \$52 billion. The confluence of these factors has created a major capital-access gap.

These fintech lenders have stepped into the credit gap and—using advances in technology and machine learning to reduce costs, automate processes, and harness massive amounts of borrower and market data—purport to have moved credit services online in a big way. For instance, these companies can offer loans directly to borrowers, with lower costs and often in a more convenient way. If I way, I

A number of developments benefit fintech lenders and make them arguably more efficient underwriters than their traditional banking counterparts. First, consumers and small businesses have a larger "digital footprint" than ever before. They typically use online banking services and online/digital accounting products. It In doing so, they create a significant bundle of information about themselves that can be captured and processed by fintech lending platforms through complex computer programs like Spark and Hadoop. It I coordinate these digital footprints, companies like Yodlee and Intuit provide software that aggregates data from various sources relative to a single borrower, which can in turn be used by fintech lenders' algorithms to process loan applications. Despite the collection of large amounts of available data, commentators say that the "silo'd data architectures which permeate the traditional banking industry" make them ill-equipped to keep up with fintech lenders.

Davidson, Why Your Credit Card Debt Is About to Get More Expensive, USA TODAY (June 14, 2017), https://www.usatoday.com/story/money/2017/06/14/why-your-credit-card-debt-get-more-expensive/102813058/. Small business loans have also become more expensive as banks build in more fees and charges (and with high interest rates) to account for the risk associated with lending to small businesses with few assets and relatively weak credit histories. See Robb Mandelbaum, Small Business Loans From New Online Lenders Are Very Costly, MONEY (July 19, 2016), https://time.com/money/4394794/small-business-loans-very-costly/.

^{138.} See Milken Report, supra note 90, at 2.

^{139.} See id. (citing Letter from Connie Evans, President & CEO, Ass'n for Enter. Opportunity to Laura Temel, U.S. Dep't of Treasury 2 (Sept. 30, 2015), https://regulations.gov/document?D=TREAS-DO-2015-0007-0054.).

^{140.} See id.

^{141.} Goldman Sachs Report, supra note 35, at 8.

^{142.} See id.

^{143.} Id. at 27.

^{144.} Id.

^{145.} See id.

^{146.} Id.

^{147.} See id.

Additionally, many of these fintech lenders are willing to extend credit to borrowers who cannot obtain loans from traditional banks. 148 With interest rates at historic lows and with consumer loan defaults also low, these fintech lending companies have become comfortable with the credit profile of many borrowers that traditional financial institutions might find too risky. 149 Moreover, investors (seeking ROI) have stepped up to the plate in funding fintech lenders. While traditional banks use the deposits of their customers and funds from asset-backed securities to make loans, fintech lenders rely solely upon investors. 150 And while it is true that the idea of connecting willing investors to borrowers in need of credit is not necessarily new to the financial sector, what makes this different is that there is no traditional (and expensive) financial intermediary. Rather, the fintech lending platform allows for lower transaction costs and, most importantly, the advanced technology that underpins loan underwriting allows borrowers to "borrow money from people they have never met and investors can lend money to a multitude of anonymous borrowers based on their credit information and statistics."¹⁵¹

Lastly, a major reason for the rapid rise in fintech lenders has to do with regulatory compliance costs (or a lack thereof). As noted in a report by Goldman Sachs's equity research group, many new, nonbank fintech lenders "are not subject to most... regulations, putting them at an advantage vs. the traditional players." Because of this, many fintech lending companies are able to take advantage of regulatory arbitrage, which further supports the new economic model. Because they are not banks with traditional prudential regulators—such as the Office of the Comptroller of the Currency, the Federal Reserve, the FDIC, or, in some sense, state banking supervisors—looking over their shoulders, these firms realize significant regulatory savings. This is not to say that fintech

^{148.} See id.

^{149.} *Id.* at 8; see also Morgan Stanley Report, supra note 12, at 6 ("Record low interest rates across multiple asset classes have led to an increased appetite for alternative assets that can deliver attractive yields.").

^{150.} See Goldman Sachs Report, supra note 35, at 17 (comparing the different business models for typical bank lending as opposed to fintech lenders like Lending Club).

^{151.} See id. at 15.

^{152.} Id. at 7.

^{153.} See id.; see also AT&T Comme'ns of Cal., Inc. v. Pac-West Telecomm, Inc., 651 F.3d 980, 984 n.4 (9th Cir. 2011) ("Regulatory arbitrage' is a pejorative term referring to the practice of operating a business to take maximum advantage of the prevailing regulatory environment (as opposed to delivering the maximum amount of value to the business's customers), usually at the expense of consumers, competitors, or taxpayers, as the case may be.").

^{154.} See Treasury Report, supra note 7, at 10 n.18 ("For purposes of this discussion, Treasury assumes the online marketplace lender is a nonbank. If the online marketplace lender is a bank, then the entity would be subject to the direct supervisory authority of its prudential federal regulator and/or its state bank regulator. Banks with assets totaling over \$10 billion are also subject to the federal consumer law supervisory and enforcement authority of the CFPB.").

lenders operate free from regulation. As discussed below, a number of regulations govern the operations of these firms.

In response to the growth in fintech lending, credit-starved consumer and small business borrowers have come running, particularly millennials who embrace online credit transactions. 155 According to one report, in every year since 2010 the fintech lending industry has doubled new loan originations, and the industry is poised to provide the global economy with approximately \$500 billion in new loans by 2020. 156 Of the \$843 billion in total outstanding consumer loans as of March 2015, industry watchers believe that about \$209 billion (25%) of that number are at risk of shifting from being originated by traditional financial institutions to being originated by nonbank online companies like the fintech lenders described in this Article. 157 The same shift is being identified in the small business lending sector as "big data analytics" and demand for small business credit continues to rise. 158 Similar predictions abound in the student loan sector an area of the financial economy that has grown faster than any other since the Great Recession—as many nonbank lenders have looked to pick up market share for government loan refinancing where traditional banks have fallen off. 159

The bottom line behind these numbers is that there is a growing demand for credit that traditional lenders are not willing or are not able to meet. As such, fintech lenders have been able to step in to that gap and provide access to capital for many consumers and small businesses. The environment in which these fintech lenders operate—with big data technology, low overhead, and (as some would argue) an underdeveloped regulatory ecosystem—has allowed them to flourish, with much opportunity to continue doing so in the future.

B. What Does It Offer?

The fintech lending sector has expanded since its inception in a number of ways, and the products it offers are ever-growing. As mentioned above, a number of companies are trying to move into the auto- and mortgage-loan

^{155.} See Morgan Stanley Report, supra note 12, at 6.

^{156.} Goldman Sachs Report, *supra* note 35, at 7; *see also Can P2P Lending Reinvent Banking?*, MORGAN STANLEY (June 17, 2016), http://www.morganstanley.com/ideas/p2p-marketplace-lending. One, however, must be careful not to overstate the rate of growth of these firms as an industry in and of themselves relative to the general growth in the consumer credit market more broadly. From 2011 to 2017 consumer credit has been roughly at or above what it was in 2007. *See* Greg Robb, *Consumer Credit Growth Slows to Nearly Six-Year Low in April*, MARKET WATCH (June 7, 2017), https://www.marketwatch.com/story/consumer-credit-slows-sharply-in-april-2017-06-07.

^{157.} See Goldman Sachs Report, supra note 35, at 10.

^{158.} See id.

^{159.} Id.

markets (albeit slowly as to the latter due to the regulatory burden on residential-mortgage-loan originations). ¹⁶⁰ In this Part I describe the major financial products offered to borrowers by fintech lending companies, generally grouped by debtor type.

1. For Consumers

The majority of loans made by fintech lenders are decidedly consumer loans. How this is driven by a pent-up demand for credit as consumers attempt to refinance their existing debt after the 2008 crisis, loan usually consolidating credit cards, home equity lines of credit, or other fluctuating lines of credit into a single loan. For instance, Lending Club reported that just under 70% of its loan originations were used to refinance and consolidate existing consumer debt. In the consumer debt.

In looking at a sample of fintech lenders, most consumer loans have a term of between two and five years. Interest rates range anywhere from 6% to 36%. Also, through limited public filings and some recent government reporting, we are now learning something about the credit profiles of those who engage with these lenders. A May 2016 U.S. Department of the Treasury report (the Treasury Report) noted that a majority of the loans issued by Lending Club and Prosper between 2009 and 2015 went to high credit-worthy individuals. 80% of Prosper's loans were to borrowers with FICO credit scores above 680, and Lending Club's loans were mostly made to individuals designated as being a low credit risk on the company's internal scale. These data suggest that major players in the online fintech lending space are not making loans to higher-risk borrowers, although there is also very little loan data on the nonpublicly traded companies.

Not all fintech lenders engage in strict underwriting when it comes to consumer credit. A company called Elevate (launched in May 2014 as a

^{160.} See Treasury Report, supra note 7, at 2; see also Odinet, Mortgage Contract, supra note 130 (discussing the Dodd-Frank Act's restrictions as to residential mortgage loan originations and the ability-to-repay rules).

^{161.} See Treasury Report, supra note 7, at 11.

^{162.} See id.

^{163.} *Id*.

^{164.} See id. at 11-12.

^{165.} See id. at 10.

^{166.} See Treasury Report, supra note 7, at 12.

^{167.} See id.

^{168.} Id.

^{169.} See id.

^{170.} Patrick Jenkins, *US Peer-to-Peer Lending Model Has Parallels with Subprime Crisis*, FIN. TIMES (May 30, 2016), https://www.ft.com/content/84f696ec-2436-11e6-9d4d-c11776a5124d.

spin-off of Think Finance) has a business model that specifically focuses on riskier borrowers.¹⁷¹ For borrowers with FICO scores less than 580, the lender offers loans with an interest rate of up to 36%.¹⁷² Similarly, fintech lenders like Earnest provide loans to borrowers with weak credit profiles.¹⁷³ Further, as of 2015 Lending Club has developed a product for high-risk borrowers. The company entered into an agreement with Citigroup whereby borrowers apply for loans through the Lending Club platform, and Citigroup—through Varadero Capital (a hedge fund)—funds the loans.¹⁷⁴ This allows loans to be made to borrowers who present more risk because the credit risk is passed on to hedge fund investors, who are willing to incur the possible downside.¹⁷⁵

2. For Small Businesses

Traditional financial institutions have been reluctant to make small business loans because they view them as having high underwriting costs with low returns. Thus, it is not surprising that fintech lending provides credit to small- to medium-sized businesses. According to the Treasury Report, in 2015 very small businesses and startup companies reported receiving loan approvals just a little over half the time. ¹⁷⁶ The same types of borrowers have fared much better in the online setting. According to a 2015 Small Business Credit Survey, about 20% of all small businesses nationwide applied for credit through the online marketplace, with 70% of them being approved. 177 The number of loan applications from the smallest of businesses (micro businesses) is up even higher. ¹⁷⁸ For instance. according to the Treasury Department study the small business fintech lender OnDeck has experienced a significant increase in loan originations between 2011 and 2015—going from below \$200 million in 2011 to slightly above \$400 million in 2013 and rocketing to over \$1.8 billion in 2015.179

^{171.} See Treasury Report, supra note 7, at 12–13.

^{172.} Id. at 13.

^{173.} See id.

^{174.} See Deloitte Report, supra note 16, at 6.

^{175.} See id.

^{176.} Treasury Report, *supra* note 7, at 13.

^{177.} FED. RES. BANKS OF ATLANTA, BOSTON, CLEVELAND, NEW YORK, PHILADELPHIA, RICHMOND & ST. LOUIS, SMALL BUSINESS CREDIT SURVEY 2015 (Mar. 2016), https://www.newyorkfed.org/medialibrary/media/smallbusiness/2015/Report-SBCS-2015.pdf [hereinafter Federal Reserve Report].

^{178.} See Federal Reserve Report, supra note 177, at 13–14.

^{179.} Id. at 13.

In 2014, small businesses received \$1.2 billion from fintech lenders, increasing to almost \$2 billion in 2015.¹⁸⁰ Most small businesses look to fintech lending platforms for products like loans for a limited term, working capital lines of credit, and loans to finance the purchase of equipment.¹⁸¹ These loans generally have short repayment periods (from one to five years) and are for relatively small amounts.¹⁸² APR on these loans run from 7% all the way up to 98.4%.¹⁸³ Lastly, the 2015 credit survey notes that the heaviest users of online credit are those companies in the "healthcare and education, finance and insurance, and business services sectors" ¹¹⁸⁴

3. For Students

Fintech lenders are making students loans.¹⁸⁵ In fact, these online credit packages have been around since about 2011.¹⁸⁶ For the most part, the online marketplace is serving students who seek to consolidate and refinance their student loan debt, although a few lenders are in the business of making loans to individuals still in school.¹⁸⁷

According to the Treasury Report, student borrowers using fintech lenders are very low credit risks. ¹⁸⁸ They generally have high credit scores, are enrolled at highly reputable academic institutions, and have high-wage job histories. ¹⁸⁹ In other words, this pool appears not to represent the average American college student. ¹⁹⁰ Although the number of fintech lender student loans has grown from \$2 billion in April 2015 to \$6 billion at the end of 2015, they still make up only a very small fraction (less than 1%) of the \$1.3 trillion in student loans nationwide. ¹⁹¹

III. HOW IS FINTECH LENDING REGULATED?

There is some uncertainty about whether existing laws and regulatory regimes apply to fintech lenders. Are they like banks? As the Dodd-Frank

- 180. Id. at 13-14.
- 181. See Treasury Report, supra note 7, at 14.
- 182. *Id*.
- 183. See id.
- 184. *Id.* (citing Federal Reserve Report, *supra* note 177).
- 185. Id.
- 186. See Treasury Report, supra note 7, at 14.
- 187. See id. at 14-15.
- 188. *Id.* at 15.
- 189. *Id.* Assumedly earning potential based on area of study might be calculated into the underwriting, but that is not clear from publicly available information.
 - 190. See id.
 - 191. See id.

Act's newly created Financial Stability Oversight Council (FSOC) has often proclaimed, "if it looks and smells like a bank, it could get regulated like one." And, even if many financial services regulatory regimes do not apply to these new market entrants, there is reason to believe that regulated financial entities will push for more government oversight of fintech lending in an effort to "level" the playing field. 193

This Article is particularly interested in the consumer experience with fintech lenders. Although I readily admit that the experience of small business borrowers is important, that is a topic for another research endeavor. As such, the following sections explore how government actors have responded to the growth of fintech lenders and reviews the extant consumer protection legal regimes that do or might embrace the bitcredit marketplace.

A. Current Governmental Responses

Official government response to the rise of fintech lending has been slow and cautious. Since the industry is in a nascent stage and appears to be innovating quickly, federal policy makers have been careful not to move too hastily. Some of this has to do with a desire not to spook the market and cause investors and firms to retreat, but some of this hesitancy also has to do with a lack of a real understanding as to the inner workings of this brave new world of lending by machine learning. This section gives an overview of how government actors have dealt with the rise of fintech lending, noting how state and federal agencies have expressed particular concern with regard to the ability of consumer borrowers to safely engage with the loan products offered by these firms. This Subpart concludes with a review of how existing consumer transaction laws attempt to protect borrowers who interact with fintech lenders.

1. At the Federal Level

The first direct government response at the federal level came from the Federal Deposit Insurance Corporation (the FDIC) on November 5, 2015 with the issuance of a financial institution letter pertaining to how FDIC-regulated institutions should manage the risk associated with purchasing loans from or participating in activities with nonbank firms.¹⁹⁴ The letter did not use the phrase "fintech lending," nor did it in any way make direct

^{192.} Goldman Sachs Report, supra note 35, at 11.

See id

^{194.} FDIC Financial Institution Letter FIL-49-2015, FDIC Advisory on Effective Risk Management Practices for Purchased Loans and Purchased Loan Participations, FED. DEPOSIT INS. CORP (Nov. 6, 2015), https://www.fdic.gov/news/news/financial/2015/fil15049a.pdf.

mention of the industry, but it did give some subtle clues indicating that fintech lenders were precisely the subject of the document. For instance, the FDIC noted that "an increasing number of financial institutions are purchasing loans from nonbank third parties and are relying on third-party arrangements to facilitate the purchase of loans, including unsecured loans or loans underwritten using proprietary models." The letter noted that reliance upon such proprietary models "limit[s] the purchasing institution's ability to assess underwriting quality, credit quality, and adequacy of loan pricing." It does not take much imagination to see that the "nonbank third parties" are the fintech lenders and that the "proprietary models" are the algorithmic underwriting programs used by such platforms. The letter admits that "[i]nstitutions are not prohibited from relying on a qualified and independent third party to perform model validation." Nevertheless, when doing so the institution "must review the model validation to determine if it is sufficient." ¹⁹⁸

On February 1, 2016, the FDIC followed up with its winter industry newsletter (called Supervisory Insights) in which it actually devoted a special section to fintech lending. The FDIC was more direct this time, coming right out and stating that it has concerns about the ability of FDIC-regulated institutions to gauge the risk associated with advancing credit to its borrowers in situations where the institution has entered into an underwriting arrangement with a fintech lender and whereby the loan underwriting is outsourced to the fintech firm. The FDIC did not necessarily caution against partnering with fintech lenders, but rather advised that institutions should treat them with the same caution and careful management that they would any third-party vendor.

The next major movement came from the U.S. Department of the Treasury. On May 10, 2016, the Treasury released a white paper titled "Opportunities and Challenges in Online Marketplace Lending." The document was the culmination of a widely circulated request for information that sought public input from a variety of online marketplace actors and stakeholders in order to review opinions, provide policy recommendations, and gauge the ongoing benefits and risks of this budding

^{195.} See id. at 1.

^{196.} Id.

^{197.} See id. at 2.

^{198.} Id.

^{199.} FDIC Commentary, supra note 2.

^{200.} See id. at 12-18.

^{201.} See id.

^{202.} See Treasury Report, supra note 7, at 1–2.

^{203.} Various federal agencies participated in the crafting of the white paper. These included representatives from the CFPB, the FDIC, the Federal Reserve, the FTC, the Comptroller of the Currency, the Small Business Administration, and the SEC. *See id.* at 2.

industry.²⁰⁴ The Treasury received about 100 responses from various interested parties and noted a number of common themes.²⁰⁵ Some of the major ones are worth mentioning here, with the first being the fear that overly automated underwriting processes might result in a disparate impact in the provision of credit,²⁰⁶ which would in turn violate fair lending laws.²⁰⁷ To that point, the report noted that borrowers are not able to double-check the data used to evaluate their loan applications once the information is submitted through the platform—thus making it more difficult to identify impermissible lending decisions such as those based on race.²⁰⁸

The report also stated that, like consumers, small businesses will likely need extra protections—mostly in the way of increased transparency for loan pricing and terms—because of their level of sophistication in financial services transactions compared to larger businesses. The report noted that much of this new market remains too untested to make any concrete observations about its long-term viability; however, Treasury officials also recognized that regulatory clarity would benefit fintech lenders significantly. Alongside this report, the Office of the Comptroller of the Currency has created a standing working group to keep watch on this growing fintech sector—although it is unknown whether the group continues to be active since President Trump's new comptroller appointment.

^{204.} See id. at 1.

^{205.} Id.

^{206.} Andrew L. Sandler et al., *Using Disparate Impact Analysis to Establish Discrimination in Lending*, 9 J.L. ECON. & POL'Y 417, 420 (2013).

^{207.} Treasury Report, *supra* note 7, at 20 ("RFI responses cited such risks as potential for disparate impact and fair lending violations, predatory lending and targeting of vulnerable borrower segments, and the use of data contrary to consumer expectations (e.g., using social media in underwriting). Consumer advocates noted that, while data has the ability to make fast and blind credit assessments; it also has the potential to capture unintended correlations that lead to disparate impact and fair lending violations or penalize customers without a large digital footprint.").

^{208.} *Id.* ("RFI responses also expressed concern that the new credit models are a 'black box,' and credit applicants do not have sufficient recourse if the information being used is incorrect. This lack of transparency into credit decisions differs greatly from the traditional credit report lending model in which applicants have the right and ability to check—and correct—their personal data used to determine loan eligibility.").

^{209.} See id. at 24 ("Consumer advocates argued that many small business borrowers should be treated as consumers. With online marketplace lenders catering to the capital needs of micro and small businesses, advocates noted that these borrowers have similar needs for safeguards.").

^{210.} See id. at 1. The online fintech has arisen during a period of low interest rates and tenuous unemployment numbers, so there is little known about how the industry will operate in a "complete credit cycle."

^{211.} OFFICE OF THE COMPTROLLER OF THE CURRENCY, SUPPORTING RESPONSIBLE INNOVATION IN THE FEDERAL BANKING SYSTEM: AN OCC PERSPECTIVE (2016), http://consumerbankers.com/sites/default/files/OCC%20whitepaper%20fin%20inno(2).pdf. For comments from the Comptroller at the September 2016 Marketplace Lending Policy Summit held in Washington D.C., see Remarks by

Importantly, fintech lenders have also drawn the attention of the Consumer Financial Protection Bureau. In March 2016 the Bureau released a bulletin that warned consumers about taking out loans with fintech lending firms. The bulletin cautioned that "[i]f you consider a fintech lender as one of your options when shopping for a loan, keep in mind that fintech lending is a young industry and does not have the same history of government supervision and oversight as banks or credit unions." The Bureau noted, however, that "fintech lenders are required to follow the same state and federal laws as other lenders." The Bureau simultaneously announced that it would start accepting complaints from consumers about fintech lenders (something, as indicated below, that the Bureau was already doing but seemingly wanted to emphasize to the American public).

There has been one other, more recent report by government officials regarding fintech lending. FSOC, chaired by the Secretary of the Treasury, is charged with issuing a report each year regarding the financial health of the American economy.²¹⁶ In its 2016 report, released in July, the council noted the emergence of fintech lending and stated that these firms offered "opportunities to lower transaction costs and improve the efficiency of financial intermediation."217 However, FSOC also stated that the rise of fintech lending and other fintech innovations like it pose a number of risks, such as "untested underwriting models" and other hazards that are difficult to predict because technology advances so quickly. 218 FSOC's report was particularly concerned with "signs of erosion in lending standards." 219 FSOC was also worried that many fintech lenders do not maintain any credit risk, which could create "incentives for [fintech lenders] to evaluate and monitor loans less rigorously" in favor of producing high volumes.²²⁰ Indeed, this is exactly the type of business model that was so prevalent in the subprime mortgage market. Firms like Countrywide would originate

Thomas J. Curry, Comptroller of the Currency, Before the Marketplace Lending Policy Summit 2016 (Sept. 13, 2016), https://www.occ.gov/news-issuances/speeches/2016/pub-speech-2016-111.pdf.

 $^{212. \}quad CONSUMER FIN. \ PROT. \ BUREAU, \ UNDERSTANDING \ ONLINE \ MARKETPLACE \ LENDING \ (2016), http://files.consumerfinance.gov/f/201603_cfpb_understanding-online-marketplace-lending.pdf.$

^{213.} See id. at 2.

^{214.} Id.

^{215.} Press Release, CFPB Now Accepting Complaints on Consumer Loans from Online Marketplace Lender (Mar. 7, 2016), https://www.consumerfinance.gov/about-us/newsroom/cfpb-now-accepting-complaints-on-consumer-loans-from-online-marketplace-lender/.

^{216. 12} U.S.C. § 5322(a)(2)(N) (2012).

^{217.} FIN. STABILITY OVERSIGHT COUNCIL, 2016 ANNUAL REPORT (2016), https://www.treasury.gov/initiatives/fsoc/studies-

reports/Documents/FSOC%202016%20Annual%20Report.pdf [hereinafter FSOC 2016 Report].

^{218.} See id. at 18.

^{219.} Id. at 126.

^{220.} See id. It should be noted that some fintech lenders, such as Affirm, Inc., keep their loans in their own portfolio. See AFFIRM, INC., https://www.affirm.com/company/ (last visited Aug. 31, 2017).

tremendously high numbers of subprime mortgage loans, only to quickly offload them and transfer the default risk to investors—leaving them with a profit and often ongoing servicing fees.²²¹

FSOC cautioned that "[f]inancial regulators will need to continue to be vigilant in monitoring [these] new and rapidly growing financial products and business practices."²²²²

2. At the State Level

There has been some limited movement by the states regarding the regulation of fintech lending. As a general matter, states have their own banking regulators that have either independent or overlapping authority with the federal government in connection with certain lenders and financial institutions.²²³ Because of this, state-level banking regulation can have an impact on the activities of fintech lenders even when they partner with federally supervised banks. For instance, the existing laws of many states require that those who solicit or arrange loans for others, or who help coordinate a loan origination process, obtain a state broker's license. 224 Fintech lenders that utilize the bank partnership model, and are thereby involved in the origination process through the processing of borrowers' applications and handling the underwriting process, would likely need to obtain such a license in those states. 225 This, of course, could create regulatory costs for those fintech lenders that assist borrowers across many different states since a number of state laws require a license in any state where a loan is made even if the lender has no physical presence in the jurisdiction.²²⁶

Further, if the fintech lender is using the direct lending model, where the firm actually makes the loan itself, then almost all states would require the entity to obtain a lending license.²²⁷ Indeed, for existing internet lenders more generally (like MyCashNow.com, Action Payday, and Integrity

^{221.} See Kerri Ann Panchuk, Washington Federal Sues BofA over Countrywide Mortgage Servicing, HOUSINGWIRE (Oct. 17, 2012), https://www.housingwire.com/articles/washington-federal-sues-bofa-over-countrywide-mortgage-servicing.

^{222.} See FSOC 2016 Report, supra note 217, at 126.

^{223.} See generally RICHARD SCOTT CARNELL, JONATHAN R. MACEY & GEOFFREY P. MILLER, THE LAW OF FINANCIAL INSTITUTIONS (Wolters Kluwer, 5th ed. 2013) (describing the federalism of the regulation of banking); MICHAEL BARR, HOWELL JACKSON & MARGARET TAHYAR, FINANCIAL REGULATION: LAW AND POLICY (Foundation Press, 1st ed. 2016).

^{224.} See Chapman & Cutler Report, supra note 29, at 43.

^{225.} *Id.* Depending on the applicable state, there can also be bonding, capitalization, and insurance requirements imposed on these firms. *See*, *e.g.* ALA. CODE § 5-19-22 (1996); CAL. FIN. CODE § 22112 (West Supp. 2011); LA. STAT. ANN. § 9:3558 (2012); OKLA. STAT. tit. 14A, § 3-503 (2014).

^{226.} See id.; see also Cash Am. Net of Nev., LLC v. Commonwealth, 978 A.2d 1028 (Pa. Commw. Ct. 2009).

^{227.} See Chapman & Cutler Report, supra note 29, at 43-44.

Payday Loans²²⁸) many state laws require a lending license.²²⁹ And, in some states like Illinois, South Dakota, and Kansas, even purchasers of consumer loans must have licenses.²³⁰ Thus, fintech lenders that use the intermediary model and ultimately purchase loans from their partner-banks need licenses in these states.²³¹ Overall, the state licensing process varies from jurisdiction to jurisdiction, going from being rather quick to more involved. 232 For instance, some states require background checks, waiting periods, the posting of surety bonds, and the payment of significant fees, not to mention the opening of lenders' books for inspection by public authorities and agreeing to various restrictions on business activities.²³³ State-level lending laws can also embrace debt collection activities.²³⁴ In those instances where the fintech lender is acting as the servicer of the loan, its debt collection activities against the borrower could raise state law collection concerns.²³⁵ Conversely, many states are far more lax in their regulation of nonbank lenders or are similarly laid-back in the enforcement of their laws governing such firms.²³⁶

One of the few state regulators to specifically take aim at the fintech lending industry is California. On December 11, 2015, the California Department of Business Oversight (DBO) began a formal inquiry into the workings of the fintech lending sector in the state of California. The office's head stated that the agency has a duty "to protect California consumers and businesses" and that it was important for the agency to be able "to assess the effectiveness and proper scope of [its] licensing and

^{228.} Connie Thompson, *State Regulators: Most Online Payday Lenders Illegal*, KOMONEWS.COM (Jan. 12, 2015), http://komonews.com/news/consumer/state-regulators-most-online-payday-lenders-illegal ("State regulators say the majority of internet payday lenders are not licensed with the state of Washington, which makes them illegal.").

^{229.} Chapman & Cutler Report, supra note 29, at 44.

^{230.} See id.

^{231.} Id.

^{232.} See id.

^{233.} See id.

^{234.} See e.g., LA. REV. STAT. § 9:3562 (1972) (The Louisiana Fair Debt Collection Practices Act); see also Ala. Code § 40-12-80 (1975) (The Alabama Fair Debt Collection Practices Act); CAL. CIV. Code § 1788 (West 1977) (The California Fair Debt Collection Practices Act-Rosenthal); N.Y. GEN. BUS. LAW § 600 (McKinney 1973) (The New York Fair Debt Collection Practices Act).

^{235.} Id.

^{236.} See Marshall Lux & Martin Chorzempa, Fintechs Need Regulatory Clarity Now More Than Ever, Am. Banker (May 12, 2017), https://www.americanbanker.com/opinion/fintechs-need-regulatory-clarity-now-more-than-ever; Gillian B. White, Borrowing While Poor, Atlantic (Nov. 5, 2015), https://www.theatlantic.com/business/archive/2015/11/fixing-the-problem-of-payday-loans/414181/ (discussing state-by-state weaknesses in the regulation of payday lenders).

^{237.} Press Release, California DBO Announces Inquiry into 'Marketplace' Lending Industry: Seeks Data, Information from 14 Online Companies (Dec. 11, 2015), http://www.dbo.ca.gov/Press/press_releases/2015/DBO%20Inquiry%20Announcement%2012-11-15.pdf; Connie Simons, California Regulator Launches Inquiry Into Marketplace Lenders, WALL ST. J., Dec. 11, 2015, https://www.wsj.com/articles/DJFVW00120151211ebcbkjo1k.

regulatory structure as it relates to these lenders."²³⁸ In order to achieve this goal, the office sent out a survey to fourteen fintech lenders.²³⁹ The inquiry asked for the firms to provide information on their business models, firm size, operation of their online platforms, funding processes, and five years of trend data.²⁴⁰ More specific questions were posed to those firms that specialize in consumer loans.²⁴¹ The DBO Commissioner noted that some of the largest fintech lenders in the country are headquartered in California, thus giving the state a significant interest in understanding the industry.²⁴² Responses were returned to the DBO in March 2016.²⁴³ The agency stated that it would "analyze that information and may send companies follow-up requests for documents and information."²⁴⁴ While no official action relative to fintech lenders has been undertaken yet by the DBO, the survey report ominously notes that the inquiry was conducted to "determine whether market participants are fully complying with state lending and securities law."²⁴⁵

More recently, in June 2016, New York's banking regulator (the New York Department of Financial Services) sent inquiry letters to nearly thirty fintech lenders seeking to learn more about their operations and business models. Earlier, in May 2016, the New York regulator initiated a targeted inquiry seeking information on Lending Club's underwriting practices to determine whether it was in compliance with fair lending and related consumer protection laws. At least some state financial regulators appear to have concluded that additional scrutiny of fintech lenders is

^{238.} See Press Release, California DBO, supra note 237.

^{239.} See id.

^{240.} Id.

^{241.} *Id*.

^{242.} See id.

^{243.} Id.

^{244.} Press Release, California Online Lending Grows by More Than 930% Over Five Years: Total Dollar Amount, Volume Top 2013 Levels; Average Size and APR Fall (Apr. 8, 2016), http://www.dbo.ca.gov/Press/press releases/2016/Survey%20Response%20Release%2004-08-16.asp.

^{245.} Erin Hobey, California Dept of Business Oversight Posts Marketplace Lending Data Covering 2010-2015, CROWDFUND INSIDER (Apr. 15, 2016), https://www.crowdfundinsider.com/2016/04/84321-ca-dept-of-business-oversight-posts-marketplace-lending-data-covering-2010-2015/.

^{246.} Suzanne Barlyn & Michael Erman, *New York State Launches Inquiry of Online Lenders*, REUTERS, June 3, 2016, https://www.reuters.com/article/us-new-york-regulator-internet-exclusive/new-york-state-launches-inquiry-of-online-lenders-idUSKCN0YP27N ("The New York Department of Financial Services sent the letter to San Francisco-based Prosper, the second-largest online lender, as well as to Avant, Funding Circle, Upstart and others, according to the person, who was not authorized to publicly discuss the matter.").

^{247.} Peter Rudegeair, *New York's Financial Regulator Subpoenas LendingClub*, WALL ST. J. (May 18, 2016), https://www.wsj.com/articles/new-yorks-financial-regulator-subpoenas-lendingclub-1463588937.

necessary. As the industry grows, we can likely expect other states to begin making similar forays. ²⁴⁸

As noted by the various groups who responded to the Treasury's request for information, opinions are mixed regarding the best role for the federal government in the fintech lending space. For instance, groups like the American Bankers Association, the Consumer Bankers Association, and the National Association of Federal Credit Unions advocated for stronger regulatory controls over fintech lenders to put them on par with mainstream financial institutions. Other groups like the Electronic Transactions Association and WebBank (a partner institution to many fintech lenders) argued that existing regulatory regimes are already adequate to address any concerns. And still other groups advocated that fintech lenders come under a single regulatory agency—set apart from other financial service providers.

Globally, regulators are still studying the positives and the negatives to fintech lending.²⁵³ The thrust of governmental interest has been centered on protecting investors who provide capital to fintech lenders, as well as on making sure that these new entrants understand the risky marketplace in which they are operating.²⁵⁴ For instance, the Australian Securities and Investments Commission warned fintech lending investors to beware that these platforms often lack much liquidity and that the quality of their underwriting is still unknown.²⁵⁵ In China, fintech lending platforms lack access to the many benefits accorded to traditional financial institutions because of their relationship with the People's Bank of China.²⁵⁶ However, industry watchers predict that the Chinese government may soon grant

^{248.} See David A. Luigs, Naeha Prakash, Ebunoluwa A. Taiwo, Liz Alspector & Gabriel W. Lezra, Client Update: Regulators Probe Marketplace Lending Business Model, DEBEVOISE & PLIMPTON (June 30, 2016), http://www.debevoise.com/~/media/files/insights/publications/2016/06/20160630_regulators_probe_marketplace_lending_business_model.pdf ("In our last update on marketplace lending, we explored the initial warning signs of increased scrutiny by federal and state regulators of online marketplace lending activity.... These developments, and FSOC's inclusion of marketplace lending in the 'potential emerging threats' section of its annual report, suggest that regulatory reform, or at least increased regulatory scrutiny of the industry, is imminent.").

^{249.} Treasury Report, supra note 7, at 26.

^{250.} Id.

^{251.} Id.

^{252.} See id. at 26 (this position was pushed by the fintech lender OnDeck, as well as the fintech lender industry group the Coalition for Responsible Business Finance). Controversially, in late 2016 the Comptroller of the Currency floated the idea of creating a federal fintech charter. See Anna Irrera, U.S. Banking Regulator Not Ready for Fintech Charter Applications, REUTERS, Sept. 13, 2017, https://www.reuters.com/article/us-occ-fintech/u-s-banking-regulator-not-ready-for-fintech-charter-applications-idUSKCN1BO2SA.

^{253.} See Morgan Stanley Report, supra note 12, at 12.

^{254.} See id.

^{255.} Id. at 13.

^{256.} See id.

online fintech lenders access to the national credit system, accompanied by a regulatory focus on consumer disclosure and capital-use monitoring.²⁵⁷

In the United Kingdom, with its single financial industry regulator—the Financial Conduct Authority—online fintech lenders enjoy a fairly simple roadmap to regulatory compliance. There is some thought by industry watchers that a more robust relationship may develop between online fintech lenders and the UK government. This might include a requirement that traditional banks who deny individuals credit refer them to alternative products offered by these online platforms. The same statement of the same s

B. Existing Consumer Protection Frameworks

In the United States regulators have taken a wait and see approach to fintech lending, being concerned chiefly with how to classify and categorize these firms and the transactions they enter.²⁶¹ Some of this is due to the fact that many existing laws already embrace these types of firms, even if they have yet to be applied robustly. This is particularly true with respect to consumer protection legal regimes. Since this Article is chiefly concerned with the consumer experience, the following Subpart looks broadly at the current consumer protection regulatory landscape in the U.S. for fintech lenders.

1. Disclosures

The most prominent law when it comes to the disclosure of consumer information in the credit context is the Truth in Lending Act (TILA) and Regulation Z, which interprets it.²⁶² The main goal of TILA is to provide meaningful disclosures to borrowers in helping them understand the nature of the financial transactions they enter into.²⁶³ Since lenders might not always disclose important information, or might not disclose it in a way that is clear to the borrower, TILA imposes an obligation (sometimes with great specificity) regarding when and how lenders must present credit

^{257.} Id.

^{258.} *Id.* In the UK, marketplace/fintech lenders are subject to the same regulations that apply to any firm that "accepts deposits." *See* Financial Conduct Authority Letter to Peer-to-Peer Lending Company CEOs (Feb. 28, 2017), https://www.fca.org.uk/publication/correspondence/dear-ceo-letter-crowdfunding-lending-businesses.pdf.

^{259.} See Morgan Stanley Report, supra note 12, at 13.

^{260.} Id.

^{261.} Id.

^{262.} See id. at 36; see also Truth in Lending Act, 15 U.S.C. §§ 1601–1665b (2012); Regulation Z, 12 C.F.R. §§ 226.1–226.59 (2017).

^{263.} GREENFIELD, infra note 277, at 173.

information.²⁶⁴ Rulemaking and enforcement of TILA is relegated, per the Dodd-Frank Act, to the CFPB.²⁶⁵ Among other things, TILA requires the disclosure of finance and any other charges, periodic interest rates, any security interests to be taken in connection with the loan, payment information, and more specific information relative to the type of loan and repayment structure.²⁶⁶

Whether a fintech loan is originated by the fintech lender itself (under the direct funding model) or by the partner-bank (under the intermediary model), TILA disclosures must be included.²⁶⁷ And sometimes borrowers can even assert TILA's rules against subsequent purchasers of loans, which would include a fintech lender or subsequent investor depending on the funding model.²⁶⁸ This gives the originating entity and the fintech lender incentives to ensure that TILA disclosure details are attended to at the time the loan is undertaken by the borrower.

Not all TILA requirements are uniform. Indeed, for different types of loans (such an installment loans versus fluctuating line-of-credit loans) and loans with different purposes (consumer loans versus educational loans), the disclosure requirements vary. While automation can certainly ease the burden of complying with these requirements, a fintech lender that offers multiple different products under different terms needs to pay careful attention to the contents of the loan documents that are generated. TILA also imposes advertising requirements on firms that market loans, including marketing that happens over the internet, which should raise concerns for fintech lenders that often operate entirely over the net. 270

TILA violations are not insignificant. Section 1640 of TILA provides for a host of civil penalties comprised of actual damages sustained by the consumer, statutory damages with a minimum amount ranging from \$100 to \$200 and a maximum amount of between \$1,000 and \$2,000, and attorney's fees and court costs.²⁷¹ Moreover, for loans that are considered "high cost," an additional statutory penalty is awarded to the borrower

^{264.} See id.

^{265.} See Changing of the Guard: Fed Defers to CFPB on Reg. Z Proposals, 03-11 BANK L. & REG. REP. 20 (2011); see, e.g., Press Release, Consumer Financial Protection Bureau Announces Annual Dollar Thresholds in Truth in Lending Act Regulations for Certain Credit Transactions (June 17, 2016), http://www.consumerfinance.gov/about-us/newsroom/consumer-financial-protection-bureau-announces-annual-dollar-thresholds-truth-lending-act-regulations-certain-credit-transactions/. TILA suits can also be brought via a private cause of action. See 15 U.S.C. § 1640.

^{266.} See generally 15 U.S.C. §§ 1601–1665b; 12 C.F.R. §§ 226.1–226.59 (both describing the various TILA required disclosures, both those that are generally applicable and those that are specific to certain credit products).

^{267.} Chapman & Cutler Report, supra note 29, at 44-45.

^{268.} Id.

^{269.} See id.

^{270.} Id.

^{271. 15} U.S.C. § 1640 (2012).

equal to the aggregate amount of any fees and finance charges paid by the borrower to the lender.²⁷² Unfortunately for borrowers, proving actual damages in TILA lawsuits has proven quite difficult, therefore most recover under the statutory damages provision.²⁷³

2. Unfair and Deceptive Practices

Aside from disclosure, a number of consumer protection laws also seek to shield borrowers from lender behavior that is meant to trick borrowers or otherwise misrepresent loan terms or products in a way to that is ultimately harmful to consumers. For instance, Section 1036 of the Dodd-Frank Act²⁷⁴ and Section 5 of the Federal Trade Commission Act²⁷⁵ prohibit any business acts or practices that are unfair or deceptive. These two laws generally fall under the authority of the CFPB and the Federal Trade Commission respectively. 276 Deceptive practices have been held to include not only actual deception but also instances where certain practices have the potential to deceive. 277 Moreover, under Section 5 it is not necessary to show that the actor intended to deceive in order for a violation to be found.²⁷⁸ A Section 5 violation can bring with it civil penalties and orders to cease activities or operations.²⁷⁹ Under its rulemaking authority pursuant to Section 5, the FTC has also promulgated its Credit Practices Rule that is geared toward prohibiting certain terms from being included in consumer credit transactions.²⁸⁰ The rule applies to any "lender," which broadly includes "[a] person who engages in the business of lending money to consumers within the jurisdiction of the Federal Trade Commission."²⁸¹ Fintech lenders that originate their own loans (through the direct funding model) must pay close attention to these requirements since they would

^{272. 15} U.S.C. § 1639 (2012) (discussing the high-cost mortgage loan and the additional disclosures it requires).

^{273.} For a discussion of the standard of proof required to prove actual damages in cases involving TILA violations, see generally *In re* Smith, 289 F.3d 1155 (9th Cir. 2002); Turner v. Beneficial Corp., 242 F.3d 1023 (11th Cir. 2001); Peters v. Jim Lupient Oldsmobile Co., 220 F.3d 915 (8th Cir. 2000); Perrone v. Gen. Motors Acceptance Corp., 232 F.3d 433 (5th Cir. 2000); Stout v. J.D. Byrider, 228 F.3d 709 (6th Cir. 2000).

^{274. 12} U.S.C. § 5536(a) (2012).

^{275. 15} U.S.C. § 45.

^{276.} See generally 12 U.S.C. § 5514 (2012) (granting authority to the CFPB); 15 U.S.C. § 45 (2012) (granting authority to the FTC).

^{277.} See Charles of the Ritz Distribs. Corp. v. FTC, 143 F.2d 676 (2d Cir. 1944).

^{278.} MICHAEL M. GREENFIELD, CONSUMER TRANSACTIONS 62 (6th ed. 2014); see also In re Chrysler Corp., 87 F.T.C. 719 (1976).

^{279.} See GREENFIELD, supra note 278, at 86.

^{280. 16} C.F.R. §§ 444.1-444.5 (2017).

^{281. 16} C.F.R. §§ 444.1(a) (2017).

meet the definition of a lender. It would appear that firms that utilize the bank-partnership model would not.

An overarching theme of many unfair and deceptive practices frameworks is the need to draw certain provisions to the attention of borrowers.²⁸² This means that arbitration clauses, electronic funds transfer consents, and powers of attorney in favor of a lender (to name a few) need to be placed in clear and unambiguous language/print and be drawn to the attention of the borrower.²⁸³ Failure to do so might be deemed an unfair or deceptive practice. The CFPB has yet to promulgate any specific rules under this section of the Dodd-Frank Act, but it has "articulated certain standards to assist entities in identifying whether an act or practice is unfair, deceptive, or abusive."284 Also, the CFPB has flexed its Section 1036 muscle at least once recently when, in May 2015, the Bureau filed a lawsuit and then entered into a consent order in a Maryland federal court against PayPal, Inc. The suit was specifically directed at the practice of one of PayPal's subsidiaries, Bill Me Later, which allows users of PayPal to send payments using borrowed money (a form of PayPal credit card).²⁸⁵ The CFPB alleged that the company was signing up consumers for this service without the individual realizing it, thereby causing them to enter into a credit relationship that they did not intend or desire. 286 The complaint stated that "[m]any consumers were enrolled in PayPal Credit without knowing how or why they were enrolled and discovered their accounts only after finding a credit-report inquiry or receiving welcome emails, billing statements, or debt-collection calls for amounts past due, including late fees and interest." The parties ultimately entered into a consent decree in which the defendant agreed to change its practices, allow for a period of CFPB monitoring, and pay \$10 million to the Bureau in penalties.²⁸⁸

In light of this case, fintech lenders must be careful about autofill functions utilized as part of the online loan application process, particularly when these electronic nudges require the borrower to opt-out (rather than opt-in) to certain loan features. Judging from the PayPal case, such a setup could result in unfair and deceptive practices enforcement (and hefty penalties) by the CFPB.

^{282.} Chapman & Cutler Report, supra note 29, at 46.

^{283.} See id.

^{284.} See id. at 74-75.

^{285.} Complaint at 1, Consumer Fin. Prot. Bureau v. PayPal, Inc., No. 1:15-cv-01426 (D. Md. Mar. 19, 2015).

^{286.} See id. at 6-7.

^{287.} Id. at 7.

^{288.} Stipulated Final Judgment & Order, Consumer Fin. Prot. Bureau v. PayPal, Inc. (D. Md. May 21, 2015), 2015 WL 3995264.

^{289.} Chapman & Cutler Report, supra note 29, at 74.

Lastly, federal law is not the only source of unfair and deceptive practices legislation. Every state has its own similar statute, ²⁹⁰ sometimes with requirements that go above and beyond the federal counterpart. ²⁹¹ These state-level regimes add another layer of complexity to the way in which fintech lenders must monitor whether they are in compliance with various consumer protection pitfalls. ²⁹²

3. Fair Lending

The Equal Credit Opportunity Act (ECOA)²⁹³ and Regulation B²⁹⁴ loom large over the lending industry, and fintech lending is no different. The ECOA prohibits creditors from using certain characteristics of a borrower—race, color, religion, national origin, sex, age, martial status, or receipt of public assistance—as a motivating factor in making credit decisions.²⁹⁵ Debtors aggrieved by such actions can seek recourse under a disparate impact theory or by proving actual intent to discriminate (often a high burden for plaintiffs).²⁹⁶ The reach of the Act is broad, as it covers many of the steps involved in a credit transaction. This includes advertising and marketing the loan and the application and approval process, as well as collection mechanisms on the backend.²⁹⁷

Importantly, the potential for discriminatory underwriting comes into play with fintech lenders because their process is so novel (and also opaque). All of these firms use big data to make credit decisions. The computer programs that collect and process this data do so through machine learning such that over time the program hones its processes without the assistance of humans.²⁹⁸

^{290.} See id. at 46.

^{291.} DEE PRIDGEN & RICHARD M. ALDERMAN, CONSUMER PROTECTION AND THE LAW § 2:9 (2017) ("[C]ommon law tort actions for false, deceptive or misleading conduct are often difficult to prove, and generally are expensive to maintain. The requirement of intent and scienter as well as the fact that attorney's fees are generally not recoverable in tort, often left consumers with little in the way of effective relief. State statutes now provide an attractive alternative for consumers to the common-law actions. Most consumers injured by the unfair or deceptive practice of a seller no longer need to be concerned with the many burdens of pleading and proving a common-law action for misrepresentation or fraud. Since the late 1960s, every state in the union has passed some form of legislation aimed at protecting consumers from market-place abuses.").

^{292.} Chapman & Cutler Report, supra note 29, at 46.

^{293. 15} U.S.C. § 1691 (2012).

^{294. 12} C.F.R. § 202 (2017). Regulation B interprets the provisions of the federal statute.

^{295. 15} U.S.C. § 1691(a)(1).

^{296.} See id.

^{297.} Chapman & Cutler Report, supra note 29, at 47.

^{298.} See generally Anthony J. Casey & Anthony Niblett, Self-Driving Laws, 66 U. TORONTO L.J. 429 (2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2804674 ("Innovations in big data and artificial intelligence will make it increasingly easy to predict outcomes. The costs of collecting, storing, processing, and analyzing data will fall. New machine learning techniques outperform traditional

This type of novel underwriting requires some explanation. The phrase "machine learning" is often used interchangeably with other related terms like "artificial intelligence," but these terms each refer to slightly different goals or approaches. Artificial intelligence is best understood as the overarching field that seeks to create complex machines that can exhibit all the characteristics of real human intelligence. Hachine learning is then viewed as a subfield of artificial intelligence in that machine learning focuses on programming algorithms to analyze data, internalize that data, and then perform a task that is commonly associated with intelligence, such as "recognition, diagnosis, planning, robot control, prediction, etc." By "learning," we can broadly say that "a machine learns whenever it changes its structure, program, or data (based on its inputs or in response to external information) in such a manner that its expected future performance improves." "301

Machine learning has made possible solving problems that, from a practical standpoint, were unsolvable by any noncomputer-related means. These problems included: finding hidden relationships among piles of data that are too large for individuals to process; using available knowledge of a task to define the task in the algorithm where such knowledge is too vast to allow for explicit encoding; developing processes that function within uncertain environments; and finally, accounting for changing environments and new knowledge being discovered by humans. Machine learning has reached this practical reality due to the technological development of progressively cheaper mass storage and processing capabilities. The processing capabilities are solved to the processing capabilities.

In the context of loan underwriting, creating a machine learning algorithm to review and score a borrower's credit application would look something like this: first, the lender would collect data, which fintech lenders do from a myriad of sources. This includes publicly available databases, web crawling, government records, credit reporting agencies,

regression approaches to prediction. Algorithms based on these approaches, using big data, will form the backbone of precise and finely calibrated laws." (footnote omitted)).

^{299.} See generally STUART RUSSELL, ARTIFICIAL INTELLIGENCE: A MODERN APPROACH (3d ed. 2015) (explaining the mechanics of the concept); IAN GOODFELLOW, YOSHUA BENGIO & AARON COURVILLE, DEEP LEARNING: ADAPTIVE COMPUTATION AND MACHINE LEARNING SERIES (2016) (expanding upon the same).

^{300.} Nils J. Nilsson, *Introduction to Machine Learning*, STAN. U. (1998), http://robotics.stanford.edu/people/nilsson/MLBOOK.pdf.

^{301.} See id.

^{302.} See id.

^{303.} Id. at 3.

^{304.} Bob Violino, *Machine Learning Adds Punch to Predictive Analytics*, ZDNET (Apr. 3, 2017), http://www.zdnet.com/article/machine-learning-adds-punch-to-predictive-analytics/.

and even data brokers.³⁰⁵ Such data can be comprised of a borrower's social media practices, web surfing activity, club memberships, and much more.³⁰⁶ Next, the data will be organized, normalized, and formatted so it can be processed. Third, the algorithm will be fed the data. This begins the process of "learning" as the program analyzes the new data alongside existing data already in the system from a prior input. In doing so, the program "learns" and perfects how it processes borrower information. Finally, the program will assign a score or grade to the loan application that reflects, at least in theory, the creditworthiness of the individual based on the widest and best available information.

How that machine learning process of underwriting codes reacts to certain types of data (such as data about race that might not be evident on the loan application itself but might otherwise manifest itself through, for instance, social media information) could raise lending discrimination problems (as discussed further in Part V).

Also, fintech lenders, like most all lenders, make their underwriting decisions, in part, based on consumer reports. Credit reporting bureaus generate credit scores based on consumers' financial and credit histories. 307 The Fair Credit Reporting Act (FCRA) and Regulation V³⁰⁸ set up the requirements for credit reporting. When relying on borrowers' credit reports, lenders must follow a number of requirements, including disclosing to borrowers when they are receiving loan terms that are not as favorable as those offered to borrowers with higher scores (sometimes called risk-based pricing).³⁰⁹ Lenders must also provide information to borrowers relative to how credit reporting information will be maintained and whether it will be shared with affiliates and other parties for purposes of protecting borrowers from identity theft.³¹⁰ Fair Credit Reporting Act requirements also entail notifying a borrower when an adverse credit decision has been made on an application using credit scores, as well as setting forth rules for how and when a lender can report a default or late payment to a credit bureau.³¹¹ Since fintech lenders are routinely using credit scores as a part of their

^{305.} Mikella Hurley & Julius Adebayo, Credit Scoring in the Era of Big Data, 18 YALE J.L. & TECH. 148, 165 (2016).

^{306.} See id.

^{307.} Chapman & Cutler Report, *supra* note 29, at 47.

^{308. 15} U.S.C. \S 1681 (2012) (and accompanying Regulation V found at 12 C.F.R. \S 1022 (2017)).

^{309. 12} C.F.R. § 1022 (2017).

^{310.} See generally 15 U.S.C. § 1681c-1 (identity theft); 15 U.S.C. § 1681s-3 (affiliate sharing).

^{311. 15} U.S.C. § 1681s-2. For adverse action notifying provisions in the Equal Credit Opportunity Act, see 12 C.F.R. §1002.9(a)(1). For the same in the Fair Credit Reporting Act, see 15 U.S.C. § 615(a)-(b).

underwriting determinations, they must comply with the FCRA and Regulation $V^{.\,312}_{\cdot}$

4. Debt Collection

Collection of online debt is also an important piece of the consumer protection puzzle for fintech lenders. The Fair Debt Collection Practices Act (FDCPA)³¹³ and its accompanying Regulation F³¹⁴ are important tools (subject to interpretation by the CFPB) for ensuring that debt collectors treat borrowers fairly.³¹⁵ The FDCPA (and analogue state laws) sets forth specific rules governing collections and imposes limitations on the ability of third-party debt collection firms to engage with debtors after a default.³¹⁶ This includes how collectors communicate with the debtors, notice requirements, and the banning of aggressive or fraudulent conduct.³¹⁷

In cases where there is a default on a fintech loan, debt collection rules govern fintech lenders. The debt collection process is plagued with issues related to the harassment of debtors, the attempted collection of stale debts or debts that are not those of the individual from whom collection is being sought, and information breakdowns in the sale or transfer of debts from creditor to creditor. Since fintech lenders can serve as servicers under the intermediary model or the direct lender in the portfolio setting, collection abuses can be a major concern. Currently the CFPB has a proposal out for a complete overhaul of federal debt collection practices, the results of which place far greater limitations on the ability of debt collectors to engage with consumers. These rules—which include greater restrictions on when and how collectors can communicate with consumers and the imposition of affirmative duties relative to the obligation to investigate the legitimacy of

^{312.} Still, in the area of fair lending, certain lending restrictions, including relative to interest rates, apply to those who serve in the military under the Servicemembers Civil Relief Act. Fintech lenders must be mindful of this law's provisions as well when dealing with service member consumers. See 50 U.S.C. § 501 (2012).

^{313. 15} U.S.C. § 1692 –1692p (2012).

^{314. 12} C.F.R. § 1006 (2017).

^{315.} See Treasury Report, supra note 7, at 38; FED. TRADE COMM'N, DEBT COLLECTION (2016), https://www.consumer.ftc.gov/articles/pdf-0036-debt-collection.pdf.

^{316.} Treasury Report, *supra* note 7, at 38.

^{317.} Id.

^{318.} Christopher K. Odinet & Roederick C. White, Sr., Regulating Debt Collection, 36 REV. BANKING & FIN. L. 869 (2017); see also Dalié Jiménez, Dirty Debts Sold Dirt Cheap, 52 HARV. J. ON LEGIS. 41 (2015); FED. TRADE COMM'N, THE STRUCTURE AND PRACTICES OF THE DEBT BUYING INDUSTRY 11–12 (2013), https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwjXrMfa7fPOAhUGpB4KHZ2sC1EQFggcMAA&url=https%3A%2F%2Fwww.ftc.gov%2Fsites%2Fdefault%2Ffiles%2Fdocuments%2Freports%2Fstructure-and-practices-debt-buying-industry%2Fdebtbuyingreport.pdf&usg=AFQjCNF6GF7pTz2iP_MZAUHNigk6nR8r0 Q&sig2=hNM2lxymgaaFM5D8wme9cQ&bwm=bv.131783435,d.eWE.

^{319.} See Odinet & White, supra note 318.

consumer debts, to name a few³²⁰—will be important for fintech lenders as they continue to attempt to operate with low overhead but find themselves subject to an intricate constellation of collection limitations and obligations. The election of Donald Trump and his appointment of an acting CFPB director that is opposed to the muscular exercise of regulatory power has called into question the future of this proposal.³²¹

5. Electronic Transactions

Several state and federal e-commerce laws are implicated because fintech lending is done entirely over the Internet. Regimes such as the Electronic Signatures in Global and National Commerce Act (called the E-Sign Act) authorize any transaction that must be in writing to also take place electronically, but only if the consumer authorizes it. The Uniform Electronic Transactions Act provides similar authorization at the state level. Fintech lenders have their borrowers authorize loans and submit all the necessary information (including the signing of promissory notes and other loan terms and conditions) through electronic signatures. Fintech lenders must ensure that their interface accurately conveys the necessary information so that borrowers give informed consent when moving forward with the financing. This means that burying electronic transaction consent language in tiny print and then claiming consumer consent (either through click-wrap or browse-wrap setups) might not suffice to show a meaningful meeting of the minds.

^{320.} See id.

^{321.} See Caroline Basile, Leaked Mulvaney Memo: CFPB Must End Regulation By Enforcement, HOUSING WIRE (Jan. 23, 2018), https://www.housingwire.com/articles/42357-mulvaney-memo-cfpb-toend-regulation-by-enforcement; Michael C. Bender & Damian Paletta, Donald Trump Plans to Undo Dodd-Frank Law, Fiduciary Rule, WALL St. J. (Feb. 3, 2017, 7:44 AM), https://www.wsj.com/articles/trump-moves-to-undo-dodd-frank-law-1486101602; Kathy Watchdog Groups Decry "Attack" on Consumer Protections, CBSNEWS (May 9, 2017, 4:33 PM), https://www.cbsnews.com/news/cfpb-consumer-financial-protection-bureau-choice-act/; Morrongiello, Mick Mulvaney Promises 'Structural Change' to CFPB, So Long As He Remains In Charge, WASH. EXAMINER (Nov. 27, 2017, 5:15 PM), https://www.washingtonexaminer.com/mickmulvaney-promises-structural-change-to-cfpb-so-long-as-he-remains-in-charge; Gillian B. White, Trump Begins to Chip Away at Banking Regulations, ATLANTIC (Feb. 3, 2017), https://www.theatlantic.com/business/archive/2017/02/trump-dodd-frank/515646/; cf U.S. Consumer Watchdog Signals Debt Collection Rules to Come, REUTERS, Jan. 23, 2018, https://www.reuters.com/article/us-usa-cfpb-mulvaney/u-s-consumer-watchdog-signals-debt-collectionrules-to-come-idUSKBN1FC35E (explaining that recent public comments by CFPB acting director Mick Mulvaney suggest debt collection rulemaking may still be on the table).

^{322. 15} U.S.C. § 7001 (2012).

^{323.} UNIF. ELEC. TRANSACTIONS ACT (UNIF. LAW COMM'N. 1999); *accord* ALA. CODE § 27:13 (2002); LA. REV. STAT. § 9:2607 (West 2001).

^{324.} Chapman & Cutler Report, supra note 29, at 79–80.

^{325.} For a discussion of browsewrap and click-wrap systems used in connection with electronic transactions, see Colin P. Marks, *Online and As Is*, 45 PEPP. L. REV. 1 (2017). For cases where courts

Also, many fintech lenders, as the dataset below indicates, set up automatic debit arrangements with their borrowers to facilitate the payment of loans. To that end, the Electronic Funds Transfer Act (the EFTA)³²⁶ and its Regulation E³²⁷ set forth specific rules regarding electronic fund transfers.³²⁸ Importantly, a borrower cannot be made to use an automatic debit as a condition of a loan, but rather must be given the option.³²⁹ Moreover, consent to allow an automatic debit requires specific and clear authorization by borrowers³³⁰ and a copy of the authorization must be given to the debtor.³³¹

6. Information Privacy

Finally, Title V of the Gramm-Leach-Bliley Financial Modernization Act³³² and its Regulation P³³³ address when and how financial institutions can disclose borrowers' information to third parties, including giving borrowers a way to opt out of certain sharing practices.³³⁴ As an initial matter, a lender must give notice of the lender's privacy policy to borrowers at the time a loan is made and then annually thereafter.³³⁵

Another important aspect of federal privacy law is a requirement that financial institutions create their own internal policies protecting consumers' information and records from being accessed by unauthorized persons or otherwise disclosed without permission.³³⁶ This includes specifying the protections that the institution uses to guard against hacking and other threats to internet security, as well as how the institution will notify consumers and respond if and when a breach occurs.³³⁷

Like other types of lending institutions, fintech lenders maintain a great deal of information about their borrowers. This is particularly true in the context of the underwriting data created for a borrower by the firm's

have been hesitant to bind consumers to certain electronic terms, see Chapman & Cutler Report, *supra* note 29, at 80 n.182–83 (citing Sgouros v. TransUnion Corp., 817 F.3d 1029, 1030 (7th Cir. 2016); Dillon v. BMO Harris Bank, N.A., 16 F. Supp. 3d 605, 615 (M.D.N.C. 2014)).

- 326. 15 U.S.C. §§ 1693-1693r.
- 327. 12 C.F.R. § 1005 (2017).
- 328. For a definition of an "electronic fund transfer," see 15 U.S.C. \S 1693a(7); 12 C.F.R. \S 1005.3(b).
- 329. 15 U.S.C. § 1693k ("No person may . . . condition the extension of credit to a consumer on such consumer's repayment by means of preauthorized electronic fund transfers ").
 - 330. 15 U.S.C. § 1693e; 12 C.F.R. § 1005.10(b), (d).
 - 331. 12 C.F.R. § 1005.10(b); see also 12 C.F.R. pt. 1005, supp. I, cmt. 10(b)-5.
 - 332. 15 U.S.C. § 6801-09 (2012).
 - 333. 12 C.F.R. § 1016.1-1016.17 (2017).
 - 334. Treasury Report, supra note 7, at 39.
 - 335. Chapman & Cutler Report, supra note 29, at 78.
 - 336. See id. at 78-79.
 - 337. See id. at 79.

algorithmic program that is generated as a result of a loan application. Since borrower information is collected entirely over the internet, this raises another level of insecurity that might not otherwise be as prominent should all the consumer's information be collected on paper or at one single, physical location. As the data below reveal, individuals who engage with fintech lenders have expressed significant concern about the use (and misuse) of their personal information.

IV. CONTENT-BASED ANALYSIS OF CONSUMER CREDIT COMPLAINTS

To truly study the fintech lending sector, it is necessary to understand what is happening on the ground for those individuals who take out loans with these firms—specifically consumer loans. To do this, I reviewed complaints against fintech lenders that consumers have submitted through the CFPB's online portal.

This qualitative research method serves several purposes. Primarily it helps us gain an understanding (albeit limited) of the underlying opinions, experiences, and motivations of those who interact with fintech lenders, as well as an idea of what types of legal relationships they enter with firms. This method also provides insights into the problems of the online credit marketplace and has the potential to help us develop ideas for how any problems identified can be addressed in the future. Admittedly there are limitations to this undertaking, which are set forth below. The data are preliminary and merely suggestive. Nevertheless, as an initial point of inquiry into the fintech lending sector, even a limited set of data is helpful in pulling back the veil on this very important and growing sector of the fintech economy.

A. The Study Data

The source of the study data is the CFPB's complaints database. Among its many functions, the CFPB allows consumers to lodge grievances against financial service providers on its website. When individuals submit complaints, they must select the type of product or activity their complaint pertains to, they must select the issue most closely associated with their complaint, and they have the option to also include a description of their problem. These complaints (and any narratives

^{338.} CONSUMER FIN. PROT. BUREAU, SUBMIT A COMPLAINT, http://www.consumerfinance.gov/complaint/ (last visited Nov. 30, 2016).

^{339.} See id. Importantly, it was only as of June 25, 2015 that the CFPB began releasing the narratives that sometimes accompany complaints. See Press Release, CFPB Publishes Over 7,700 Consumer Complaint Narratives About Financial Companies (June 25, 2015),

included with them) are then sent from the CFPB to the firm that is the subject of the grievance.³⁴⁰ The transmission of the complaint to the applicable financial services company triggers the running of a number of timelines.³⁴¹ First, the company must respond to the complaint within fifteen days of receiving it.³⁴² If the company fails to do so, the CFPB might elect to investigate the complaint.³⁴³ The response by the company, once submitted, is sent to the consumer, who then has thirty days to respond.³⁴⁴

The data from the complaints are collected and processed by the Bureau. If an industry or firm generates a great deal of complaints or consumers regularly complain about particular products or practices, the CFPB might then respond by engaging in enforcement actions or by promulgating regulations to curtail unfair practices.³⁴⁵

B. The Process

Using the free dataset provided through the CFPB's online portal,³⁴⁶ I first examined complaints from June 2011 (which is as far back as the database goes) through December 31, 2016. I searched the dataset for all

https://www.consumerfinance.gov/about-us/newsroom/cfpb-publishes-over-7700-consumer-complaint-narratives-about-financial-companies/.

- 340. See Pamela Foohey, Calling on the CFPB for Help: Telling Stories and Consumer Protection, 80 LAW & CONTEMP. PROBS. 177, 182 (2017) (The CFPB "also publishes a Company Portal Manual that details how companies must respond to complaints and delineates the five available final response categories: closed with monetary relief, closed with non-monetary relief, closed with administrative response, closed with explanation, and closed (without relief or explanation).").
 - 341. See id.
- 342. See id. at 182 n.36 ("12 C.F.R. § 227.2 (2016). A company is given up to sixty days to provide a full response, as long as it chooses the 'in process' option within fifteen days.").
- 343. Id. at 182 (citing Angela Littwin, Why Process Complaints? Then and Now, 87 TEMP. L. REV. 895, 901 (2015)).
- 344. *Id.*; see also Ian Ayres, Jeff Lingwall & Sonia Steinway, Skeletons in the Database: An Early Analysis of the CFPB's Consumer Complaints, 19 FORDHAM J. CORP. & FIN. L. 343, 345–47, 357 (2014); Katherine Porter, The Complaint Conundrum: Thoughts on the CFPB's Complaint Mechanism, 7 BROOK, J. CORP. FIN. & COM. L. 57, 65 (2012).
- 345. See Foohey, supra note 340; see also Littwin, supra note 343, at 895 ("The CFPB not only expends significant resources on this task, but also uses complaints to inform supervision and examination, rulemaking, enforcement actions, and consumer education."); Stacy Cowley, Consumer Protection Bureau Chief Braces for a Reckoning, N.Y. TIMES (Nov. 24, 2016), https://www.nytimes.com/2016/11/24/business/consumer-protection-bureau-chief-braces-for-a-reckoning.html ("The C.F.P.B. has exceeded my highest expectations," [Senator Elizabeth Warren] said in an interview. 'There's a lot of tools lying around at various regulatory agencies that never get used. But the bureau is using all of its tools, and is out there making a difference."").
- 346. Although the CFPB has been collecting complaints since June 2011, the database has only been available to the public since June 2012. See Press Release, CFPB Publishes Over 7,700 Consumer Complaint Narratives About Financial Companies (June 25, 2015), https://www.consumerfinance.gov/about-us/newsroom/cfpb-publishes-over-7700-consumer-complaint-narratives-about-financial-companies/.

those entries involving a group of seventy fintech lenders³⁴⁷ (ranging from the very small, new, and obscure to the very large, well-established, and well-known). Using the CFPB's categorization system, I was able to further divide the complaints by types of loans and by where the complaints geographically originated. I then explored the issues or problems raised by the individual consumers. In doing so, I was able to isolate the particular types of issues that are recurring and comprise the bulk of the total complaints.

I also read the many narratives that were submitted alongside the complaints. These stories, submitted by consumers, helped give color and further background to the substance of the complaints, as well as helped me gain insight into the frame of mind of the person submitting the grievance. Sometimes the complaints were very descriptive, telling the story from beginning to end—including information about the loan application process, how and when the loan was funded, issues with payment, and then subsequent problems with managing the loan or dealing with a default. At other times the complaints were very short and expressed a great deal of distress and feelings of powerlessness. Often the complaints asked the CFPB to take action against the company—either broadly in order to investigate the firm's practices or more specifically to try to help the particular complainant.

There are a number of limitations with the CFPB complaint data. First, not all consumers who experience problems with fintech lenders submit complaints. Thus, what can be gleaned from the data about the profiles and experiences of those who use fintech lending is limited. There are a few things that other academics and commentators have already determined about who submits complaints through the CFPB's online portal, and the results of their efforts merit discussion here.

In her recent work, Professor Pamela Foohey gives an overview of the literature on who uses the CFPB portal, and she makes a number of important observations that apply equally to my endeavor.³⁴⁸ First, only certain individuals, usually with more economic strength, likely submit

^{347.} The firms included in the dataset search are Lending Club, Lend Up, Prosper, SoFi, Funding Circle, Marlette Funding, Affirm, Common Bond, Upstart, Peer Street, Sharestates, Able, Street Shares, Fundation, Earnest, Bond Street, CAN Capital, Dealstruck, Opportun, Rapid Financial Services, Payoff, DriverUp, Bizfi, BlueVine, LoanNow, Afluenta, Auxmoney, Best Egg, Better Finance, Financeit, Freedom Plus, Greensky, Harmoney, Lendico, Kabbage, Lending USA, Loan Depot, Peerform, Loan Hero, Lufax, Money Lion, Pave, Personify Financial, Rocket Loans, Zopa, Society One, Rate Setter, Apple Pie, Assetz, Behalf, Biz 2 Credit, Credibly, Crediblity Capital, The Credit Junction, eProdigy, IOU Central, Leaf, Lift Forward, Quaterspot, Rapid Advance, Square, Swift Capital, ThinCats, Climb, Credible, DRB, Prodigy, Future Finance, and Power Financing. They were drawn from the same group used by the Milken Institute in its report. See Milken Report, supra note 90.

^{348.} See Foohey, supra note 340, at 184–85.

complaints.³⁴⁹ Professor Angela Littwin conducted a study using census data to conclude that "complainants appear to have a higher average median income and higher levels of education than the general population."³⁵⁰ Moreover, "African-Americans appeared to use the complaint function at a slightly higher rate than their proportion of the general population."³⁵¹ A separate study conducted by Professors Ian Ayres, Jeff Lingwall, and Sonia Steinway found that "complaint rates are statistically higher in ZIP codes with higher concentrations of African-Americans, Hispanics, and seniors."³⁵²

The combination of these findings tells us something about who submits complaints. Generally it is only those with more education and economic resources who use the complaint function, which is not surprising since it takes some internet savvy and access to tech resources in order to navigate the CFPB's online portal and submit a complaint. Also, minority groups and the elderly, due to often being the targets of predatory financial practices, make up a significant portion of the broader complaint pool. Thus, it might be that many more individuals, likely falling into one or more of these minority categories but lacking financial resources or education, are missing from the study data but nevertheless experience problems with fintech lenders. Nevertheless, since this is the best information available for studying the experiences of those who borrow through fintech lending, it is instructive for better understanding the sector, its promise, and its potential perils.

C. The Results

I ran the names of seventy fintech lending firms using the CFPB's search function. Only eleven firms returned complaints filed against them: Avant, Common Bond, Earnest, Greensky, Lending Club, Lend Up, Loan Depot, Marlette Funding, Prosper, Sofi, and UpStart. Table 1 shows the breakdown of complaints by fintech lender, divided by year.

^{349.} *Id.* at 184 ("[T]hose consumers who opt in to making their narratives public may differ from other consumers who lodge complaints. Other scholars' observations about these online complainants provide some clues about who shares their stories.").

^{350.} Littwin, *supra* note 343, at 910.

^{351.} See Foohey, supra note 340, at 185.

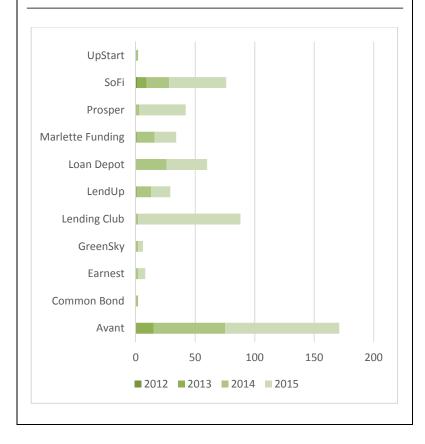
^{352.} Ayres, Lingwall & Steinway, supra note 344, at 364.

^{353.} Foohey, *supra* note 340, at 184.

^{354.} Pamela Foohey, *Lender Discrimination, Black Churches, and Bankruptcy*, 54 HOUS. L. REV. 1079 (2017) (detailing why African-Americans pay more for credit and consumer goods).

Table 1
Complaints by Fintech Lender

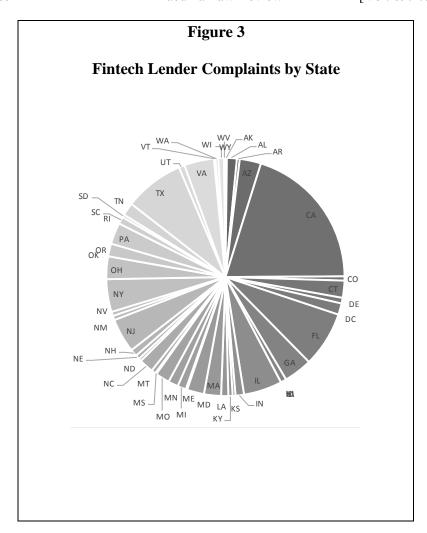
| Online Lender | 2012 | 2013 | 2014 | 2015 | 2016 | Totals |
|------------------|------|------|------|------|------|--------|
| Avant | 0 | 0 | 15 | 60 | 96 | 171 |
| Common Bond | 0 | 0 | 0 | 2 | 0 | 2 |
| Earnest | 0 | 0 | 0 | 2 | 6 | 8 |
| GreenSky | 0 | 0 | 0 | 2 | 4 | 6 |
| Lending Club | 0 | 0 | 0 | 2 | 86 | 88 |
| LendUp | 0 | 0 | 1 | 12 | 16 | 29 |
| Loan Depot | 0 | 0 | 0 | 26 | 34 | 60 |
| Marlette Funding | 0 | 0 | 1 | 15 | 18 | 34 |
| Prosper | 0 | 0 | 0 | 3 | 39 | 42 |
| SoFi | 1 | 0 | 8 | 19 | 48 | 76 |
| UpStart | 0 | 0 | 0 | 2 | 0 | 2 |
| Totals | 1 | 0 | 25 | 145 | 347 | 518 |



The total number of complaints against fintech lenders was 518, with about 33% of those directed at Avant. The vast majority of complaints were filed between 2014 and 2016. There was only one complaint (against Sofi) in 2012. The CFPB has only been accepting complaints since June 2011, and the database has only been available to the public since June 2012. The number of complaints against the fintech lenders in the study has risen on a year-to-year basis.

Figure 3 shows the breakdown of overall complaints by the states where the complaints were originated. California comes in with the largest number of complaints (104 of the total 518, comprising about 20%). The rest of the complaints are spread thinly among the other states. The vast majority of fintech lenders are headquartered in California, followed by a large number in New York. Most all are incorporated in Delaware. Thus, although these firms have no storefronts and despite all lending activities and borrower interaction taking place online, the physical location of the headquarters appears to have some correlation to consumer lending (perhaps revealing something about the target market of fintech lenders headquartered in California).

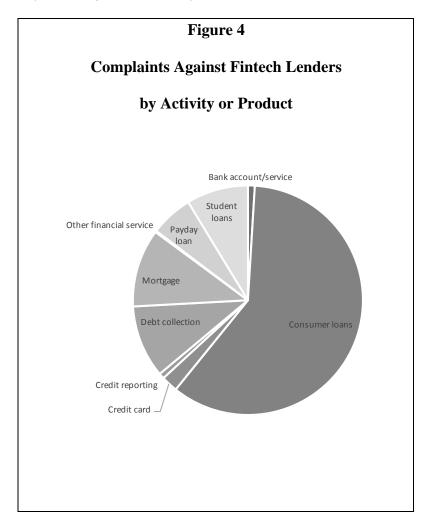
^{355.} See Press Release, CFPB Publishes Over 7,700 Consumer Complaint Narratives About Financial Companies (June 25, 2015), https://www.consumerfinance.gov/about-us/newsroom/cfpb-publishes-over-7700-consumer-complaint-narratives-about-financial-companies/.



The narratives revealed a great deal of overlap in the issues complained about from lender to lender. For instance, consumers reported grievances against all eleven lenders related to unauthorized credit reporting inquiries and the lack of disclosure of interest rates and terms.

To engage in a more nuanced analysis, I divided the complaints based on categories selected from the portal's menu. At the time of the study, when consumers submit a complaint through the portal they must select a "loan" or a "product/service." The loan options include mortgages, student loans, vehicle loans or leases, payday loans, and any other consumer loans. The products and services options include bank accounts or services, credit cards or prepaid cards, credit reporting, debt collection, money transfers or virtual currencies, and any other financial services. Figure 4 below breaks

down the complaints by loan, which I call "product," and product and activity, which I just call "activity."



The clear majority of the 518 complaints (60%) were for consumer loans.³⁵⁶ The CFPB describes "consumer loans" as including "pawn loans, title loans, online loans, store loans, and other installment loans, such as those used for person-to-person or fintech lending, rent-to-own, or medical debt." Mortgage loans account for 57 complaints. Mortgage loans are a

^{356.} Complaint breakout was as follows: bank account/service: 5; consumer loan: 310; credit card: 12; credit reporting: 4; debt collection: 53; mortgage: 57; other financial service: 1; payday loan: 31; student loan: 45.

^{357.} See Scott M. Pearson, CFPB Begins Taking Marketplace Lending Complaints and Issues Consumer Bulletin, CONSUMER FIN. MONITOR (Mar. 7, 2016),

type of consumer loan, but because they involve security over real estate (typically over the consumer's principal residence), they have their own category. After complainants select the product or activity related to the grievance, they then select the issue (or what one might say, the problem) they are having with the fintech lender. Table 2 shows a breakdown of the number and percentages of complaints by issue category, excluding those categories that made up less than 1% of all complaints.

Table 2

Complaints Against Markeplace Lenders

by Issue Area

| Issue | No. of complaints | Percentage | |
|-------------------------------------|-------------------|------------|--|
| Managing the loan or lease | 148 | 28.57% | |
| Taking out the loan or lease | 78 | 15.06% | |
| Shopping for a loan or lease | 41 | 7.92% | |
| Probs when you are unable to pay | 34 | 6.56% | |
| Application, originator, broker | 33 | 6.37% | |
| Getting a loan | 29 | 5.60% | |
| Attempts to collect debt not owed | 16 | 3.09% | |
| Loan servicing, payments, escrow | 16 | 3.09% | |
| Disclosure verification of debt | 15 | 2.90% | |
| Dealing w/my lender or servicer | 13 | 2.51% | |
| Communication tactics | 9 | 1.74% | |
| Applied for loan, didn't receive \$ | 8 | 1.54% | |
| Improper contact or sharing of info | 8 | 1.54% | |
| Charged unexpected fees/interest | 7 | 1.35% | |
| Can't contact lender | 6 | 1.16% | |
| Total | 518 | 100.00% | |

As the table indicates, the largest number of complaints (over half) relate to how the loan was managed. The next highest category deals with taking out a loan (detailed further below). Complaints involving managing a line of credit, changing account terms, the inability to pay a loan, arbitration, loan modifications and foreclosure, and credit decisions/ underwriting each comprised less than 1% of the total number of complaints. However, there is one caveat to these issue categories that must be kept in mind. Complainants select the issue categories themselves—the CFPB does not do this for them. Therefore, sometimes complainants select the wrong category or select a category that does not best fit the problem they are encountering. As the narratives below indicate, often times a complaint lodged under "taking out the loan" deals with an issue relative to advertising and marketing or the credit decision process. Similarly, selecting a consumer loan as the "product" excludes the possibility of selecting, for instance, loan modification, collection, and foreclosure, since those issues are only available as choices if the borrower selects a mortgage as the product under the CFPB's system. In other words, the selection of the product/activity will dictate the options available for the complainant to use in selecting the issue (they vary). Because of this (both categorization mistakes that the consumer may make and limitations with the portal's selection options), the integrity of the categories is not perfect, but it does give some insight into the problems being reported by borrowers and at least how they are perceived to fit into the credit experience.

Of all the complaints in the dataset, a little over half (55%) were accompanied by narratives. The largest percentage, as indicated above, went to issues related to managing the loan. Under the CFPB's database breakdown, the "managing the loan" tag is for problems related to billing, late fees, damage or loss, insurance, credit reporting, or privacy. Prepayment penalties regularly arose as an issue in the narratives. One consumer stated that after retiring early due to health reasons, she and her husband took out a loan from Avant in order to help them make ends meet until her Social Security payments commenced. The couple had planned on paying off the amount, and, in fact, selected Avant because it advertised "no prepayment penalty." She noted in her narrative, however, that Avant did not disclose to her that she was required to make any prepayments in a set lump sum. Thus, without the larger lump sum available, she was unable to avoid additional interest payments by paying

^{358.} Consumer Complaint Database Breakdown, CONSUMER FIN. PROT. BUREAU (2013), http://files.consumerfinance.gov/f/201303_cfpb_consumer-complaint-database-fact-sheet.pdf [hereinafter CFPB Database Breakdown].

^{359.} Consumer Complaint Database, CFPB, No. 2102610 (Sept. 8, 2016).

^{360.} *Id*.

^{361.} See id.

down the principal in smaller amounts. She noted, "I asked AVANT the right questions, AVANT purposefully answered in half truths. I totally feel lied to, mislead [sic], and scammed. Is this predatory lending? Is this legal? Is there anything I can do?"³⁶² A 2015 complaint chronicles a borrower who paid off an online loan and even received confirmation from the lender, but later started receiving calls stating she was late on her payments. After a long period of back and forth with the lender, it was discovered that the borrower's loan was inadvertently taken off the "paid in full" list. As a result, the lender had auto-debited payments from her checking account—payments that she no longer owed. The consumer stated that they "debited my account for bill and grocery money that i [sic] needed to take care of my family." Other borrowers expressed similar concerns about a lack of correct information regarding making prepayments, or the misapplication of prepayments to interest rather than principal.

Consumers also complained about difficulties making regular installment payments. In one narrative, a borrower reported that he was making payments by having them auto-debited from his checking account. However, the consumer had to close the account because he had been the victim of fraud. The consumer tried to notify the fintech lender seven times to arrange to have a new account added for auto-billing, only to be strung along and even hung up on by a consumer service representative. The individual stated that "[t]hey are outrageous with regard to how many problems they create to prevent you from paying your monthly installment. Clearly, they are trying to get consumers to default, so they can jab you with excessive late (and other) fees. The complaints detail issues related to misinformation and difficulty with how payments were to be made.

^{362.} Id.

^{363.} Consumer Complaint Database, CFPB, No. 1540235 (Aug. 27, 2015).

^{364.} Id.

^{365.} See id.

^{366.} Id.

^{367.} Consumer Complaint Database, CFPB, No. 1800061 (Feb. 23, 2016) (applying prepayments of principal to loan interest); *see also* Consumer Complaint Database, CFPB, No. 1778491 (Feb. 9, 2016) (involving a payoff and refusal/delay in fintech lender depositing the funds; continued to auto-debit from account; would not call borrower back).

^{368.} Consumer Complaint Database, CFPB, No. 2011936 (July 14, 2016).

^{369.} *Id*.

^{370.} See id.

^{371.} Id.

^{372.} Consumer Complaint Database, CFPB, No. 2131629 (Sept. 26, 2016) (regarding misinformation about when payment is due on loan documents); Consumer Complaint Database, CFPB, No. 1714786 (Dec. 23, 2015) (long delay in lender processing payment by check caused borrower to incur late fees).

The second largest category of complaints (about 15%) dealt with the process of "[t]aking out the loan," including issues related to term changes (often mid-deal changes or changes after the loan closing), required add-on products, trade-in payoffs, and fraud.³⁷³ Problems in this area seemed particularly thorny. One consumer complained of an "exorbitant fee" that "they call, an origination fee which was not reasonably disclosed in the agreement."³⁷⁴ Another consumer explained that in the course of taking out a loan for a debt consolidation, "The loan documentation was not available until the loan was funded and there is nothing in the documentation that indicates the origination fee that would be charged."375 In another complaint the borrower claimed that she was initially drawn to this particular fintech lender because the company advertised "NO HIDDEN FEES" prominently on its website. 376 However, after the loan was funded she noticed that a significant fee was deducted from the deposited amount: "I did not realize they took out a 5 % [sic] origination fee because it was buried throughout the loan process."³⁷⁷

other complaints detailed instances where encountered a great deal of difficulty going through the online application process—including instances where consumers felt their personal information was compromised. For instance, one complaint detailed a consumer applying for a loan with a fintech lender after receiving a preapproval letter and then being asked to input personal bank account and routing information.³⁷⁸ A short time later, the individual was told that her application was denied.³⁷⁹ The consumer noted how disorienting it was to be preapproved and then denied, but more importantly stated: "I am a little concerned when a bank asks me pertinent information with regard to me [sic] bank account without actually approving me."³⁸⁰ In other words, the complainant seemed to indicate that she believed the preapproval and application submission might have been all for the purposes of capturing her personal information, without any real intention of advancing her credit.

In another complaint, a mother recounted escaping a domestic violence situation and taking out a fintech loan to help pay for "essentials so that my daughter and I would not be sleeping on the floor."³⁸¹ After providing

^{373.} CFPB Database Breakdown, supra note 358.

^{374.} Consumer Complaint Database, CFPB, No. 1997483 (July 4, 2016).

^{375.} Consumer Complaint Database, CFPB, No. 1821728 (Mar. 8, 2016).

^{376.} Consumer Complaint Database, CFPB, No. 2010045 (July 13, 2016).

^{377.} Id.

^{378.} Consumer Complaint Database, CFPB, No. 1764811 (Jan. 29, 2016).

^{379.} *Id*.

^{380.} See id

^{381.} Consumer Complaint Database, CFPB, No. 1292011 (Mar. 19, 2015).

information and signing the loan documents online, she reported: "I was contacted and harassed for maybe XXXX times for financial information, resigning contracts for the same loan, and given empty promises that the money would be deposited into my account." After many attempts to have the funds deposited, the lender stopped being responsive. They have all of my financial information, including my checking accounts, social security number, bank statements, addresses, etc... [sic] Please help." Please help."

In an example of the level of reliance some borrowers place on these firms when they are desperate for funds, another consumer explained having applied for a loan and been approved—even to the point of receiving a congratulatory email from the fintech lender and a schedule of when the deposit would be made into his account.³⁸⁵ The consumer, assured of the forthcoming funds, "jumped on paying some bills with my bank account funds as I knew I would have a big deposit during the week." But, after receiving the approval email, later that same day the consumer "received a deflating email stating that my application had expired and I was welcome to apply again - but the email also stated that I was suddenly ineligible (based on information they already had provided in my credit report)."387 The consumer stated that he felt defeated and that the lender had played "mind games" with him, and the resulting denial after having paid the bills wreaked "financial havoc on my bank account." Other individuals reported being preapproved, and then later told they were denied. Further, in a game of bait and switch, some consumers report being preapproved, then denied, and then subsequently steered to more expensive products. 389

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382. Id.
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^{383.} See id.

^{384.} See id.

^{385.} Consumer Complaint Database, CFPB, No. 1401567 (June 2, 2015).

^{386.} See id.

^{387.} Id.

^{388.} See id.

^{389.} Consumer Complaint Database, CFPB, No. 1954052 (June 3, 2016); see also Consumer Complaint Database, CFPB, No. 1772108 (Feb. 4, 2016) ("I applied and was approved for a loan from SoFi [and] [s]igned and submitted the acceptance paperwork.... I 'm [sic] being told that the fate of these funds is in the hands of a funding department that no one can contact, has access to, or has a phone number for.... At this point I think I was the victim of a fraudulent scam aimed to obtain personally identifiable information from consumers. The interest rate on my acceptance paperwork is actually higher than what I was approved for, and that paperwork says I have a payment due on XXXX XXXX, even though I never received a dollar from this company. At the very least, this is an inefficient, misleading, and dishonest company who flat out lies to consumers. Worst case scenario, it's a complete scam."); Consumer Complaint Database, CFPB, No. 1684735 (Dec. 5, 2015) (approved for a loan, had trouble getting loan documents to load on computer; back and forth with the company; received email saying loan was denied); Consumer Complaint Database, CFPB, No. 1669773 (Dec. 24, 2015) ("I am so confused [sic] I never withdrew the loan and I feel like it was all a game to give me the run around.").

At other times, consumers complained about receiving communications from fintech lenders for loans for which they never applied. One complaint detailed debt collection efforts for such a phantom loan: "XXXX loans have been opened in my name and I did not apply for the loans, nor did I authorize anyone else to open accounts in my name. . . . I have also received mail from a collection agency for the Lending Club loan." Another complainant stated that she "received a notice of adverse action" on her credit report for "a XXXXX loan which [she] never applied for. . . ." Similarly, some consumers reported having reviewed a fintech lender's website or creating an account for purposes of obtaining information (without completing an application), but nevertheless received notices that a credit inquiry had been made in their names:

Every time I log into the website onto my dashboard, I would receive an email of adverse action stating that I applied for a loan on that date, the date i [sic] visited my dashboard, and that they were not able to refinance my loan, this has happened more than 3 times, at no time did I ask to refinance my loan, I did not give them permission to pull my credit report....³⁹³

Similarly, "loans have been opened in my name and I did not apply for the loans, nor did I authorize anyone else to open accounts in my name." ³⁹⁴

A number of the narratives dealt with situations in which borrowers were experiencing financial distress and the lenders were unwilling to try to work out a resolution.³⁹⁵ In one report,³⁹⁶ a consumer stated: "I have fallen

^{390.} Consumer Complaint Database, CFPB, No. 1788015 (Feb. 15, 2016); *see also* Consumer Complaint Database, CFPB, No. 1964795 (June 12, 2016) (detailing a situation of a loan being taken out, without the borrower's knowledge, in order to pay for dental work).

^{391.} Consumer Complaint Database, CFPB, No. 2020133 (July 20, 2016).

^{392.} Consumer Complaint Database, CFPB, No. 1755453 (Jan. 24, 2016) (all caps omitted) (this complaint was catalogued as "[s]hopping for a loan," but should really be under "taking out a loan," thus revealing another weakness in the CFPB's database—a lack of fidelity to the categorization system by virtue of giving consumers the ability to self-select the tag).

^{393.} Consumer Complaint Database, CFPB, No. 1687731 (Dec. 8, 2015); Consumer Complaint Database, CFPB, No. 1788015 (Feb. 15, 2016) ("I have had continual issues with a company called Lending Club Corporation.... They had sent me an email stating I was denied credit on XXXX/XXXX/15.... However when I wrote to them to tell them that I did n't [sic] apply for any loan they stated that if I felt like I was a victim of fraud then I needed to file with the FTC which I did, file a police report which I did and do an affidavit so they could share only with the police dept.").

^{394.} Consumer Complaint Database, CFPB, No. 2020133 (July 20, 2016) ("XXXX company is XXXX and the other is Lending Club. After submitting affidavits with XXXX to dispute the accounts, the debts are still showing up on my credit report. I have also received mail from a collection agency for the Lending Club loan. The inquiries also need to be removed.").

^{395.} CFPB Database Breakdown, supra note 358.

^{396.} See Michelle Singletary, The Vicious Cycle of Payday Loans, WASH. POST (Mar. 28, 2015), https://www.washingtonpost.com/business/get-there/the-vicious-cycle-of-payday-loans/2015/03/27/4ff7bec2-d3e1-11e4-ab77-9646eea6a4c7 story.html?utm term=.671a692e9d8c.

into a vicious cycle where I am unable to pay my debt and so it just keeps growing, and I now owe more than I take in each month."³⁹⁷ The consumer said she contacted the fintech lender and tried to discuss her options but was "completely dismissed."³⁹⁸ She stated: "I have reached out over phone and email and expressed m[y] desire to work out a plan in good faith, but they refuse to cooperate."³⁹⁹ Some complained of the lender hanging up when the consumer tried to make contact about an inability to pay. Others reported issues with collection efforts, such as repeated calls even when the borrower had told the lender that she was unable to pay. This company calls every hour on the hour."⁴⁰² One consumer who described himself as having only "a single income supporting my wife and XXXX children" and "want[ing] to make this right" tried to reach the company to discuss a settlement after he defaulted but had difficulty getting someone on the phone who could help.

Another complaint stated that the due date on the loan disclosure documents gave one date, but the company later gave the borrower a different date: "The company tells me I have 14 days from due date to avoid late fees. This is unacceptable to me as is [sic] not the due date I expected from the original TILA documents. This is an unfair and deceptive lending practice."

Perhaps the most interesting aspect of the complaints in this area is the consistent commentary on how long the process for approval is. This is despite claims by industry proponents and in the Treasury Report that fintech lenders offer expedited processes.⁴⁰⁵

Many consumers in the dataset reported that the application process was misleading and that they often received conflicting information about their eligibility. 406

[T]hey say that I am pre approved for a {\$20000.00} loan at a great interest rate. I fill out the application and they turn me down based

^{397.} Consumer Complaint Database, CFPB, No. 1817610 (Mar. 4, 2016).

^{398.} Id.

^{399.} *Id*.

^{400.} See, e.g., Consumer Complaint Database, CFPB, No. 1320657 (Apr. 8, 2015).

^{401.} Consumer Complaint Database, CFPB, No. 1364579 (May 7, 2015); *see also* Consumer Complaint Database, CFPB, No. 1993754 (June 30, 2016) ("At a 25.9 % [sic] interest rate and knowing what I know now, I never would have entered into this agreement with Lending Club. I question whether their tactics and practices are even legal.").

^{402.} Consumer Complaint Database, CFPB, No. 2073052 (Aug. 19, 2016).

^{403.} Consumer Complaint Database, CFPB, No. 1749886 (Jan. 20, 2016).

^{404.} Consumer Complaint Database, CFPB, No. 2131629 (Sept. 26, 2016).

^{405.} See supra Part I.A.

^{406.} Consumer Complaint Database, CFPB, No. 1872752 (Apr. 11, 2016) ("Lending club sends me XXXX offers a week to my home. I do not want a loan from them. They refuse to stop mailing me offers.").

on things found on my credit report. I keep getting this in the mail and I am tired of them promising loans and then turning me down." 407

Another complaint stated: "I was informed by Avant that I was approved for {\$12000.00}. I provided all of the requested documents.... On XXXX/XXXX/15, I was informed my application expired...."⁴⁰⁸

Loan processing problems persisted as others reported that the interest rate of the loans was often unclear, claiming things like "[a]t time of approval, the interest rate/terms were not disclosed." Still other consumers were misled into believing that their applications would not show up on their credit report. "They imply that no 'credit inquiry' would be done," but "[l]ater, I was advised by a credit monitoring tool that I had an inquiry that has adversely impacted my credit score." Sofi Lending reported that I applied for a loan, but all I did was check the possible rate, and the website said it would not affect my credit. Now, it 's [sic] showing on my XXXX report as an inquiry."

A handful of complaints detailed instances where the fintech lender made representations to the borrower that a refinancing of the loan would be available—assurances that later proved not to be true:

I was told, that after 1 yr. I was going to be able to lower my interested [sic] rate on [my] debt consolidation loan. But, it turns out, that I have to reapply & pay another lending club processing fee. The rate is ridiculously high compare [sic] to current rates. I only took this loan in desperation.⁴¹²

And again: "[T]he interest rate they charge me is so high and it 's [sic] impossible to lower it. I was told that after one year of making on time payments they would lower it but now after one year, they told me I do n't [sic] quality [sic]."

- 407. Consumer Complaint Database, CFPB, No. 1973112 (June 16, 2016).
- 408. Consumer Complaint Database, CFPB, No. 1643729 (Nov. 6, 2015).
- 409. Consumer Complaint Database, CFPB, No. 1654852 (Nov. 13, 2015).
- 410. Consumer Complaint Database, CFPB, No. 2062804 (Aug. 14, 2016).
- 411. Consumer Complaint Database, CFPB, No. 2028702 (July 25, 2016).
- 412. Consumer Complaint Database, CFPB, No. 2033626 (July 27, 2016).

^{413.} Consumer Complaint Database, CFPB, No. 2005358 (July 10, 2016); see also Consumer Complaint Database, CFPB, No. 1962710 (June 9, 2016) ("While in the process of applying, I realized the interest rate was very high (36 %) [sic]. I was very uneasy about accepting the approval but was trying to mend my credit so I asked about the ability to have the loan refinanced internally after a period of time to have the interest rate lowered. When speaking with a representative, they assured me that if I met a few compensating factors, I would be able to refinance and have a lower interest rate applied to my loan. . . . I have continually tried to refinance with every application resulting in a decline. I have asked numerous times for reasons for the decline and get the run-around from customer service. I

Consumers also complained about changes in the terms of their loans, such as interest rates, fees, and penalties, as well as changes in access to lines of credit or reductions, suspensions, or terminations of lines. 414 One consumer took out a personal line of credit, but was later told by the lender that the agreement was being unilaterally changed to an installment loan. 415 The consumer noted that "[t]hey indicated the terms of the line of credit allowed this change without my consent."416 The consumer also stated that "[w]hat bothers me the most since this change, is that my monthly payments keep increasing even though I am paying the minimum amount with no further loan withdraws [sic] or charges to the account."417

Other consumers complained that key terms of the loan were hidden or not readily ascertainable: "The rate/terms on a loan with Avant Credit/XXXX were not disclosed/agreed to," and "[t]hey are charging an extremely high rate of 35.94 % [sic], this was not disclosed at the time or did not appear on my screen." Another consumer stated that the fintech lender failed to properly disclose limitations on payments methods. 420

Altogether, these narratives and the summary data paint a picture (albeit an imperfect one) of how some American consumers are interacting, using, and dealing with fintech lenders. While this information certainly has its limitations (as discussed above), it is likely the best "on the ground" information currently available about this nascent industry. As discussed below, it serves as a useful tool as we think about crafting the law, policy, and best practices around the bitcredit marketplace.

finally received a valid answer last year, that it had not been a year since origination and they advised I wait until after a year to re-apply for a refinance. That I did. When I re-applied, I was declined again.").

- 414. See CFPB Database Breakdown, supra note 358.
- 415. Consumer Complaint Database, CFPB, No. 1498331 (Aug. 2, 2015).
- 416. *Id*.
- 417. See id.
- 418. Consumer Complaint Database, CFPB, No. 1772127 (Feb. 4, 2016).
- 419. Consumer Complaint Database, CFPB, No. 1740482 (Jan. 15, 2016); see also Consumer Complaint Database, CFPB, No. 1654852 (Nov. 13, 2015) ("At time of approval, the interest rate/terms were not disclosed, nothing was signed on paper. Ive [sic] been making timely payments via their website and just noticed their interest rate of 35.9 % [sic] is unusually high. Because of this high rate, the payments I 've [sic] made thus far do not even reflect on balance owed, they go towards [sic] interest. Had I known about this prior, I would not have agreed to supposed [sic] terms, which were not disclosed at the time.").
- 420. Consumer Complaint Database, CFPB, No. 1569089 (Sept. 17, 2015) ("I wanted to pay off the loan using an increase I received on the credit limit of a credit card. I was told the company does n't [sic] accept credit card payments above the amount of the monthly payment. When I asked where it states that in the contract, I was told it does n't [sic]. That 's [sic] just company policy. Had I been told this, I would have forgone the loan.").

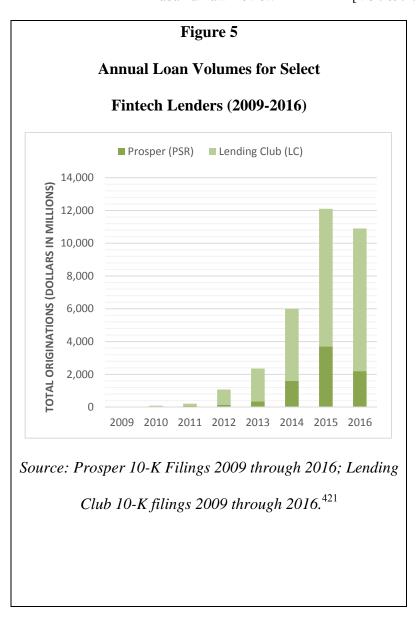
V. RECOMMENDATIONS AND POLICY GOALS

In light of the way the fintech lending industry operates, the types of products it offers to borrowers, and the nature and content of the complaints lodged against fintech lenders through the CFPB complaint portal, a number of themes emerge about how a future regulatory framework or industry-wide guideline for fintech lenders might be developed. This final Subpart considers some of the broad policy considerations that should be kept in mind as lawmakers, industry leaders, and policy advocates craft rules and guidelines for fintech lenders, as well as suggests a regulatory framework to address some of these concerns.

A. Accessing Industry Information

One of the limitations to understanding fintech lending is a lack of information. For example, there is no data on the total number of loans made annually by all fintech lenders. There is some information about the numerical dollar amount of loans and the volume of loan originations made by some of the fintech lenders that are publicly traded or otherwise voluntarily release such information, but this does not give an industry-wide snapshot. To assist in analyzing the data above, a research assistant and I examined the SEC 10-K filings of two major U.S. marketplace lenders—Lending Club and Prosper.

According to our research, the total value of fintech loans made in 2015 by these firms was estimated at a little over \$12 billion, double from their 2014 numbers of about \$6 billion. Indeed, although both companies saw a decrease in the loan value volume between 2015 and 2016, the historical trend has been dramatically positive. The following chart shows the annual loan volume of these fintech lenders from 2009 through 2016.



Because of a lack of industry-wide loan transaction data, it is difficult to measure whether the total number of complaints lodged against fintech lenders with the CFPB, even taking into account the idiosyncratic nature of those who might submit complaints, is representative of all fintech lending borrowers. The industry appears to still be in a ramp-up phase and therefore

^{421.} Note that Prosper's first 10-K only reported data for half of a fiscal year. Note also that in 2012, Lending Club changed from a fiscal year ending March 31.

time will ostensibly yield more and better information about the financial products and practices of fintech lenders and the satisfaction level of consumers.

What is clear is that the industry has shown incredible growth and the potential for more. The value of loans made by these fintech lenders has increased dramatically over time, as noted in Figure 5, from roughly a mere \$1 billion in 2011 to about \$11 billion in 2016. The Comptroller of the Currency (OCC) estimates that the total amount of *all* fintech lending in 2015 amounted to \$28.6 billion (although its source data is not disclosed). Since most of the consumer loans made by fintech lenders tend to be in rather small dollar amounts (anywhere from \$1,000 to \$40,000), the significance of 518 complaints from 2012 to 2016 may seem rather minimal compared to OCC's \$28.6 billion in loan amounts.

But, although the complaints might make up a rather small number compared to overall loans made, there are reasons to nevertheless view them as telling an important story that deserves policy consideration. First, we are confronted with the problem of knowing how many aggrieved parties actually complain (data that are practically impossible to obtain). If the complaints represent a small percentage of a larger pool of complaints that otherwise go unreported, then the data are more significant.

Also, if the dollar amounts are relatively small, then we might not expect a very high percentage of people who are aggrieved to actually take the time to go through the complaint process. Studies show that consumers do not complain very often, and social science research reveals a number of reasons why this is the case. Sometimes it is based on a lack of success from prior unsuccessful complaint experiences⁴²³ or on the perceived cost of complaining versus the benefit.⁴²⁴ At other times, consumers choose not to act because of certain personal attitudes about complaining⁴²⁵ or a lack of assertiveness, even if complaining is viewed as desirable.⁴²⁶ And still it is often the case (as prior studies regarding CFPB complaint users have

^{422.} NAT'L RISK COMM., OFFICE OF THE COMPTROLLER OF THE CURRENCY, SEMIANNUAL RISK PERSPECTIVE, 18 (2016), https://www.occ.gov/publications/publications-by-type/other-publications-reports/semiannual-risk-perspective/semiannual-risk-perspective-spring-2016.pdf. The source of this information, including how OCC obtained the transaction data, is not indicated in the report.

^{423.} Ralph L. Day, *Modeling Choices Among Alternative Responses to Dissatisfaction*, 11 ADVANCES IN CONSUMER RES. 496, 496–99 (1984).

^{424.} See id.; see also Marsha L. Richins, Consumer Perceptions of Costs and Benefits Associated with Complaining, in Refining Concepts and Measures of Consumer Satisfaction and Complaining Behavior 50–53 (Ralph Day & H. Hunt eds., 1980).

^{425.} Marsha L. Richins, *An Investigation of Consumers' Attitudes Toward Complaining*, 9 ADVANCES IN CONSUMER RES. 502, 502–06 (1982).

^{426.} See Marsha L. Richins, Word of Mouth as an Expression of Product Dissatisfaction in International Fare, in CONSUMER SATISFACTION AND COMPLAINING 100–04 (1983).

shown) that environmental and demographic variables can affect when and if individuals complain. 427

Probably more often than not, consumers feel like complaining is not worth their time because they will not be able to get anyone (whether the company, the government, or an industry group) to do anything about their problem. For instance, the Technical Assistance Research Programs (TARP)—which is an initiative founded in 1971 at Harvard University to study customer service in the public sector—found that most consumers do not complain when they experience a problem. In one study, TARP found that in a scenario where the average loss to a consumer as a result of an adverse business practice was \$142, only roughly 31% of individuals complained. Similarly, in a Neilsen Company study, the global research firm found that for small dollar consumer losses resulting from product defects, only about 3% of individuals complain.

Thus, if most consumer loans made by fintech lenders are of relatively small value, there is a likelihood that many borrowers do not seek to register their grievances. Also, since fintech lenders have no physical storefronts with employees that can receive complaints in person, the act of complaining entirely over the internet or phone might seem futile to a financially distressed or frustrated consumer.

Second, while industry and third-party reports indicate that most fintech loans are made to prime borrowers, the stories from the complaints in the dataset suggest that a number of loans are being made to Americans in moderate to deep financial distress. Complaints told stories of funds used to pay for everything from basic living expenses like groceries and utility bills to aiding an escape from a potentially life-threatening situation. These stories, even if not the norm, deserve attention from policy makers and the fintech lending industry. Sometimes a small number of publicly reported grievances can belie a larger problem—particularly when the source industry of the problem is still nascent. Further, while some fintech loans

^{427.} Jagdip Singh & Robert E. Wilkes, *A Theoretical Framework for Modeling Consumers' Response to Marketplace Dissatisfaction*, 4 J. of Consumer Satisfaction, Dissatisfaction & Complaining Behav. 1, 1–12 (1991).

^{428.} Ralph L. Day & Stephen B. Ash, Comparisons of Patterns of Satisfaction/Dissatisfaction and Complaining Behavior for Durables, NonDurables and Services, in New DIMENSIONS OF CONSUMER SATISFACTION AND COMPLAINING BEHAVIOR 190–95 (1979).

^{429.} TECH. ASSISTANCE RESEARCH PROGRAMS & U.S. OFFICE OF CONSUMER AFFAIRS, CONSUMER COMPLAINT HANDLING IN AMERICA: FINAL REPORT (1979) [hereinafter TARP Consumer Complaint Report]; see also John Goodman, Basic Facts on Customer Complaint Behavior and the Impact of Service on the Bottom Line, ASQ COMPETITIVE ADVANTAGE 1, 4 (1999), http://jackiehuba.com/media/docs/2010/06/basicfacts.pdf.

^{430.} See TARP Consumer Complaint Report, supra note 429.

^{431.} See JOHN TSCHOHL, ACHIEVING EXCELLENCE THROUGH CUSTOMER SERVICE 296 (1991). Interestingly, in this study only 30% of the individuals returned the defective product and got money back. The majority (70%) took the loss and discarded the item. *Id.*

may work well for borrowers, as some payday loans do as well,⁴³² there might well be a meaningful number of subprime fintech loans going to borrowers who are in or easily susceptible to financial distress. Consider that about 25% of all Americans live paycheck to paycheck⁴³³ and are thereby highly likely to be caught in a web of debt from which they cannot escape. Many of the narratives in the study reveal that a degree of distress and desperation led consumers to borrow through fintech lenders.

Lastly, the intensity of recent attention paid to the industry by state and federal regulators indicates some level of concern—perhaps based on data and other information not yet disclosed to the public—regarding fintech lenders. Indeed, from a historical perspective special attention by the CFPB (as indicated by their March 2015 bulletin and accompanying announcement regarding fintech lenders) is often directly followed by enforcement actions and broader regulatory enactments. Whether the special interest shown to the fintech lending industry by Treasury, FDIC, CFPB, and at least two state financial services regulators will reveal larger, more systemic problems remains to be seen. One thing that is certain, however, is that the fintech lending industry has shown incredible growth. In just the first quarter of 2016, Lending Club made loans amounting to \$2.75 billion—that's a growth rate of 68% from twelve months earlier. For perspective, JPMorgan Chase (which is a much larger financial institution) only grew its consumer lending by 16% in that same period.

Lastly, the narratives provided in the complaints serve as vignettes of a growing industry with lots of potential, but about which more information is needed. As indicated below, I propose that a state-level, uniform regulatory framework be developed that would require annual reporting by these firms and regular oversight by a prudential regulator. Through this system of oversight, within a regulatory sandbox environment, state banking supervisors would not only gain better insight into the inner workings of these firms (which could be shared with federal consumer protection officials), but could also assist in helping the public better understand how fintech lending works. For instance, these state regulators could create a system for keeping proprietary information provided in

^{432.} Borrower and Voter Views of Payday Loans, CONSUMER FIN. SERVS. ASS'N OF AM. ET AL. (2016), http://docplayer.net/23786877-March-borrower-and-voter-views-of-payday-loans.html.

^{433.} See June 2014 Financial Security Index Charts, BANKRATE (June 23, 2014), http://www.bankrate.com/finance/consumer-index/financial-security-charts-0614.aspx.

^{434.} See Christopher K. Odinet, Payday Lenders, Vehicle Title Loans, and Small-Value Financing: The CFPB's Proposal to Regulate the Fringe Economy, 133 BANKING L.J. 263, 264, 286 (2015).

^{435.} Patrick Jenkins, *US Peer-to-Peer Lending Model Has Parallels with Subprime Crisis*, FIN. TIMES (May 30, 2016), https://www.ft.com/content/84f696ec-2436-11e6-9d4d-c11776a5124d.

^{436.} See id.

fintech lending reports private while releasing other firm information for study by consumer advocates and academics.

The collection of information from regulated entities is already prevalent in the financial sector—including when it comes to consumer lending. For instance, the Federal Reserve and OCC require reports from banks relative to safety and soundness, monitoring systemic risk to the financial sector, and compliance with fair lending laws. Similarly, the FDIC requires deposit summaries and related reports on a quarterly basis. Even state-level financial regulators require reports (usually quarterly) for lenders and mortgage brokers that are regulated at the state level. And it is almost always the case that the public is allowed access to all or some part of the reported information. The same philosophy and system would be applied under the regulatory sandbox approach (described in more detail below) with fintech lenders, which would in turn allow for the public and those who protect the public interest to better understand not only how consumers are using these products but also how the technology that underpins these firms is created and operates.

B. Protecting Against Lending Discrimination

A comment that appeared with some frequency in the narratives (and appears to be a consistent concern from government regulators both at the state and federal levels) has to do with fair lending considerations. As mentioned above, the Equal Credit Opportunity Act applies to protect against discrimination in lending practices based on the borrower's race, color, religion, national origin, sex, marital status, or age. As a general matter, Regulation B prohibits lenders from requesting information from a prospective borrower as to these prohibited considerations.

However, it is widely known that fintech lenders are using big data about borrowers, gathered from various sources, to make underwriting decisions. The chief problem is that information about how these machine learning programs work is unknown. The programs themselves and their

^{437.} Financial and Regulatory Reporting, BD. OF GOVERNORS OF THE FED. RES. SYS. (Feb. 12, 2018), https://www.federalreserve.gov/supervisionreg/topics/reporting.htm.

^{438.} Consolidated Reports of Condition and Income, FED. DEPOSIT INS. CORP. (July 5, 2016), https://www.fdic.gov/regulations/resources/call/index.html.

^{439.} See, e.g., Mortgage Banker Quarterly Reporting, N.Y. DEP'T FIN. SERVS. (Feb. 24, 2015), http://www.dfs.ny.gov/banking/mortgage_bankers_qtr_rpt.htm.

^{440. 15} U.S.C. § 1691 (2012).

^{441. 12} C.F.R. § 202.5 (2017).

mechanics are closely held trade secrets by fintech lenders and not open to inspection. 442

So far, the only window into this world, as noted by law and technology scholars Hurley and Adebayo, has come in the way of a patent application for a particular lender known as ZestFinance (which has ceased operations). 443 This application, as well as information from a few other places, reveals the wide variety of sources from which fintech lenders draw underwriting data. For instance, data points include social media practices such as a person's friends, likes, and posts. 444 Also, some firms note that the amount of time a consumer spends scrolling through the terms and conditions of an online application or a lender's website generally also indicate creditworthiness. 445 Further, spending habits and geographic location data also play a part in credit scoring. For instance, borrowers living in high-cost cities and who spend half their income on rental expenses are considered prototypical borrowers and more likely to receive favorable credit terms. 446 But a person who spends a similar percentage of his or her income on rent in a less expensive city is deemed to exhibit wastefulness and thus merit a higher cost loan. 447 Industry commentators also note that information such as "a consumer's email addresses, brand of car, Facebook friends, educational background and college major, even whether he or she sends text messages in all capital letters or in lower case",448 all serve as useful data points for making underwriting decisions.

How this information is being used and processed behind the wall of the fintech lender's proprietary underwriting algorithm naturally raises concerns about discriminatory lending. For instance, poor grammar or improper capitalization can be connected to a poor educational background, which in turn has connections to issues of race and class. The extent to which social media data (or any big data derived from the internet or

^{442.} See generally Frank Pasquale, The Black Box Society: The Secret Algorithms That Control Money and Information 101–39 (2015) (discussing how data and the internet have come to play a growing role in finance).

^{443.} Hurley & Adebayo, *supra* note 305, at 164; *see* U.S. Patent App. No. 14/276,632 (filed May 13, 2014); *see also* Laura Shin, *ZestFinance Moves Into Near-Prime Lending with New Basix Loan*, FORBES (July 15, 2015, 7:17 AM), https://www.forbes.com/sites/laurashin/2015/07/15/zestfinance-moves-into-near-prime-lending-with-new-basix-loan/#272fce4df4e1.

^{444.} Penny Crosman, *This Lender Is Using AI to Make Loans Through Social Media*, AM. BANKER (Dec. 28, 2017), https://www.americanbanker.com/news/this-lender-is-using-ai-to-make-loans-through-social-media; Stephanie Armour, *Borrowers Hit Social-Media Hurdles*, WALL ST. J. (Jan. 8, 2014), https://www.wsj.com/articles/borrowers-hit-socialmedia-hurdles-1389224469.

^{445.} Hurley & Adebayo, supra note 305, at 166.

^{446.} Id. at 165.

^{447.} Id.

^{448.} See Gregory Roberts, Regulator Wades into Big Data Credit Swamp, BLOOMBERG (Apr. 20, 2017), https://www.bna.com/regulator-wades-big-n57982086887/.

^{449.} See id.

various other sources) about a borrower can be predictive about the ability to repay a loan or the borrower's overall creditworthiness can easily be called into question when one considers the many unknowns relative to machine learning underwriting. Since underwriting is done entirely through a computer program, the human element is removed—for good and for bad. This means that a machine learning program might, in analyzing thousands of data, attribute otherwise facially neutral attributes about a borrower (i.e., where someone lives, the nature of their social media posts, or text messaging habits) as being correlative to borrower attributes that the law prohibits from being taken into consideration in credit decision making (such as gender, race, and religion). In this way, as Hurley and Adebayo explain, machine learning has the potential to spread and even augment existing underwriting bias based on suspect characteristics, such as a person's religion, community, and familial connections.

Policy makers need to become intimate with the technology behind these machine learning mechanisms. Recent studies indicate that discrimination in the provision of credit is still very much a problem in the United States—particularly when it comes to black and Hispanic borrowers. There is little reason to believe that fintech lending will be materially different. And indeed, one study of over 110,000 loan applications received by the fintech lender Prosper between June 2006 and May 2007 revealed significant discrimination. When comparing applications from similarly situated white borrowers, black borrowers were 30% less likely to receive a loan and, when they did, were assigned interest rates 60 to 80 basis points higher than their white counterparts.

Since remote data gathering and machine learning is a significant part of the digital underwriting process, being able to identify a pattern of credit discrimination requires knowledge of machine learning and how the algorithms that result from these processes are constructed based on certain data inputs. And, even that knowledge may not lead to identifying direct discrimination on the front end since the program "learns" over time and changes its underwriting process as more data is incorporated into the pool from past transactions. Again, learning how things work "under the hood"

^{450.} *See* PASQUALE, *supra* note 442, at 38 ("Algorithms are not immune from the fundamental problem of discrimination, in which negative and baseless assumptions congeal into prejudice.").

^{451.} See generally supra Part I.A.

^{452.} See Hurley & Adebayo, supra note 305, at 182.

^{453.} See id.

^{454.} See Greenfield, supra note 278, at 299 n. 9–11.

^{455.} See Devin G. Pope & Justin R. Sydnor, What's in a Picture? Evidence of Discrimination from Prosper.com, 46 J. HUM. RESOURCES 53, 53–92 (2011).

^{456.} See id. at 55.

is critical to crafting an effective fintech lending regulatory scheme that can guard against discrimination in the provision of credit by these firms.

One way this can be achieved, as further explained below, is through an opening of the process to a prudential supervisor using a regulatory sandbox approach. In this kind of regulatory environment, the fintech lender would allow a regulator access to information about the firm's underwriting process (including the development of the software) in exchange for temporary exemptions from certain legal restrictions or requirements. In doing so, financial regulators would have the ability to discern whether there exists patterns of discriminatory lending practices under the fintech lender's underwriting program. Indeed, banking regulators already have processes in place to detect evidence of unfair lending in regulated lending institutions. For instance, OCC monitors the compliance of national banks with fair lending laws as a part of Community Reinvestment Act examinations. 457 Also, the Board of Governors of the Federal Reserve System utilizes a risk-oriented, fair lending examination process when assessing banks for whether they provide equal access to credit and have procedures in place to guard against lending discrimination. 458

The state-level prudential regulator I propose would provide monitoring of credit activity and, in exchange for this cooperation and access by fintech lenders, would provide some level of protection against liability for these firms. One way this might be achieved is through a temporary exemption of the regulated entities from state-level fair lending laws. Without the potential for liability (at least for a limited duration), fintech lenders might be more willing to expose themselves to the watchful eye of a prudential regulator, at least until there is accord on the proper underwriting process that achieves both the firm's goal of efficient and accurate underwriting and the government's goal of equal access to credit. State-level legislation would be needed to achieve this goal, since state fair lending laws are enacted by the state legislatures and typically provide for private causes of action. 459 As for federal fair lending laws (like the Equal

^{457.} Upholding the Spirit of CRA: Do CRA Ratings Accurately Reflect Bank Practices?: Before the Subcomm. on Domestic Policy of the Comm. of Oversight & Gov't Reform, 110th Cong. 110–59 (2007) (statement of Ann F. Jaedicke, Deputy Comptroller of Compliance Policy for the Subcommittee on Domestic Policy of the Committee on Oversight and Government Reform) ("The OCC has a comprehensive and rigorous fair lending oversight program, which is our foundation for ensuring that national banks comply with the fair lending laws. Additionally, the OCC conducts CRA examinations of national banks to evaluate whether they are meeting the credit needs of their communities. The CRA evaluation process provides the OCC with an opportunity to incorporate evidence of discriminatory credit practices into the assessment of a national bank's efforts to meet its communities' credit needs.").

^{458.} See John Alderman, Risk-Focused Fair Lending Examinations, FED. RES. BANK OF MINNEAPOLIS (Nov. 1, 1999), https://www.minneapolisfed.org/publications/community-dividend/riskfocused-fair-lending-examinations.

^{459.} See, e.g., GA. CODE ANN. § 7-6A-7 (2003).

Credit Opportunity Act and the Fair Housing Act), Congress would have to participate in granting the temporary exemption. This could potentially be achieved through a concerted state—federal effort. Presumably, the U.S. Department of Justice or some other stipulated agency would want to participate in the monitoring of the fintech lending firms during this exemption period. Moreover, states could provide backdrop guarantees or grants for some of these firms to help give them a financial cushion should down periods occur. This, again, would be in exchange for heavy regulatory oversight with an aim that the public interest would be greatly served by a safe and effective fintech lending sector that opens the credit box for more Americans.

C. Interfacing with the Technology

In the narratives, many consumers encountered difficulties navigating the online applications of fintech lenders. This usually entailed issues with not only understanding the loan terms—including fundamental aspects of the credit relationship—but also with understanding when an application was actually being submitted and when a credit inquiry was actually being made. Thus, a fundamental feature of any regulation or industry-lead effort for fintech lending should specify how information is displayed on borrowers' screens as they progress through the process of applying for a loan.

Unlike working with traditional lenders, borrowers who apply online do not interact with humans. If borrowers are sitting across the table from a lender in a bank (or even standing with a payday lender at a counter), they have the opportunity to ask questions. They also have a sense of the progression of the process and how far along the loan officer may be in making the review. Thus, the point at which a credit report will be ordered might be clearer to borrowers in this conventional context. Moreover, when it comes to key credit terms, borrowers are able to ask questions directly and seek clarification as to provisions that might seem confusing or that are not disclosed. On a computer, there is no opportunity to speak with a person. Rules that require certain disclosures to be prominently featured on the borrower's screen (either in a certain typeface, different color, or set off from the rest of the page) would help address some of these concerns.

This is an effort that could be lead through a regulatory process (either by state-level financial regulators or by a national regulator like the CFPB acting under its TILA rulemaking authority) or through the combined efforts of industry groups. Ideally, the state-level regulator would provide broad guidance and industry groups for fintech lenders would develop best practices guidelines in which firms would participate in their crafting and would follow.

D. Use and Sale of Consumer Data

The study data indicates many instances where consumers felt that their social security numbers, bank account information, and other identifying information had been mishandled or potentially used in a way that went beyond mere underwriting.

Harkening back to questions about the use of data derived from the machine learning process, there is reason to be worried about what a fintech lender does with underwriting information about a borrower. Is it possible that information about individuals with weak credit profiles (according to the algorithm) is being used to redirect those individuals to more high-cost loans or financial products with predatory features (as at least one narrative indicated)?⁴⁶⁰ These data could also be used to target vulnerable consumers with advertisements on social media for predatory loans.⁴⁶¹ Indeed, this practice is not unheard of. In 2013, the Federal Trade Commission attempted to enter into a consent decree with Equifax whereby the firm was said to have sold sensitive consumer credit information to companies that specialized in offering high-cost and dangerous loans.⁴⁶² The names ascribed to these lists included "Hard Times," "X-tra Needy," and "Retiring on Empty"—all clearly intended to convey that these consumers were easy targets for subprime credit.⁴⁶³

Because of the uncertainties about the efficacy of the machine learning, underwriting process and how such data could be used, federal law (particularly the Fair Credit Reporting Act and appropriate provisions of Gramm-Leach-Bliley) should be amended to prohibit the sharing of this information by the fintech lender with any third parties. Federal law already prohibits the sale of prescreened consumer credit information to companies unless it is used for the purpose of making a firm offer of credit or insurance. While sharing this information might be appropriate in the context of the straight sharing of traditional credit information (like credit scores and default payment histories) and where a definite credit offer is to be made, fintech lenders (at least until more is known about the underwriting process) should keep underwriting data within the walls of the firm. Further, there should be flow-through liability for data brokers who

^{460.} See, e.g., Consumer Complaint Database, CFPB, No. 1772108 (Feb. 4, 2016).

^{461.} See Hurley & Adebayo, supra note 305, at 168.

^{462.} See id. at 167-68.

^{463.} See id. For the full text of a congressional hearing where this scandal was discussed, see What Information Do Data Brokers Have on Consumers, and How Do They Use It?: Hearing Before the S. Comm. on Commerce, Sci., & Transp., 113th Cong. (2013).

^{464.} See 12 C.F.R. § 1022.54 (2017). Consumers must be given the opportunity to opt out of the dissemination of pre-screened information, but this requires the consumer to take action—often something that consumers may not know to do. See also Hurley & Adebayo, supra note 305, at 167–68.

bundle fintech underwriting data and offer them to firms when that data is sold in contravention of this prohibition. 465

With respect to this proposed ban on fintech lenders selling underwriting information to third parties, disclosures should communicate this restriction clearly to consumers. This should include a disclaimer that appears prominently during the application process, and on the lender's website more generally, that loan applicant information will be kept confidential and will be used only for purposes of ascertaining the individual's creditworthiness for the instant credit application. Further, fintech lenders should convey this information beyond the minimum disclosure requirements in terms of form and presentation (tiny print and click-wrap terms of so as to better educate borrowers (perhaps graphically/visually on the screen) about the use and final destination of their personal information. The prohibition itself would come in the way of an amendment to the Fair Credit Reporting Act, and industry groups could develop standards or templates for conveying such information.

E. Designing a Regulator

A final issue relates to how the fintech lending industry should be regulated—a topic referenced in the preceding sections. As noted above, while the CFPB and the FTC have general oversight when it comes to certain unfair and deceptive practices, there is no agency or group of agencies that handles the monitoring of fintech lending firms and these firms' compliance with internal control mandates, disclosure requirements, and fair lending obligations. In other words, there is no strong or consistent prudential regulator.

Currently, the only clear regulators are state-level financial services agencies. As noted above, some state regulators like those in California and New York have taken a particular interest in fintech lenders. The downside of having a state-by-state approach, however, is that fintech lenders operate across many states due to the fact that they do all their business online. Having to follow, for instance, a different set of reporting requirements for a myriad of states where a firm makes fintech loans could prove to be quite burdensome (not to mention that not all state lending licensure regimes are created equal). Judging from the comments made by these firms in response to the Treasury's request for information, there is already a general fear among the fintech lending community that too heavy of a

^{465.} Meta S. Brown, *When and Where To Buy Consumer Data (And 12 Companies Who Sell It)*, FORBES (Sept. 30, 2015, 9:49 AM), https://www.forbes.com/sites/metabrown/2015/09/30/when-and-where-to-buy-consumer-data-and-12-companies-who-sell-it/#4001fb303285.

^{466.} See Colin P. Marks, Online and As Is, 45 PEPP. L. REV. 1 (2017).

regulatory burden would undercut the very thing that they purport makes fintech lending attractive and possible—the efficiencies achieved through low overhead and innovation. Therefore, a single regulator that could promulgate consistent and unified rules for consumer protection could help ensure firms remain nimble.

To that point, in December 2016 the Comptroller of the Currency floated the idea of creating a nonbank fintech charter at the federal level, which would include fintech lenders. This was met, however, with heavy opposition from state-level banking regulators who viewed this as a way to undercut (by way of preemption) the laws of some states that provide significant consumer protections. In April 2017, a group of state banking regulators filed suit against OCC, alleging that the federal agency lacked the authority to regulate nonbank entities of this type. At the time of this writing that litigation is still ongoing.

There is, however, a danger to having a single regulatory body in that it opens the door for regulatory capture. If there is only one master, it might be possible for firms to exercise undue influence on the regulatory landscape to their benefit and to the detriment of consumers and the credit economy as a whole. Thus, the agency selected for the task of regulating fintech lenders must have a sufficient level of independence from those it regulates (particularly when it comes to how the agency is funded).⁴⁷⁰

In the end, I suggest that it would be both desirable (and most politically tenable) to leave regulation of these lenders (as is the case for mortgage originators and brokers⁴⁷¹) at the state level but still address the patchwork quilt issue through the use of a uniform law.⁴⁷² In July 2017, the Uniform Law Commission published an act aimed at providing a similar framework for regulating businesses that work in the virtual currency space

^{467.} OFFICE OF THE COMPTROLLER OF THE CURRENCY, EXPLORING SPECIAL PURPOSE NATIONAL BANK CHARTERS FOR FINTECH COMPANIES 2 (2016), https://www.occ.gov/topics/responsible-innovation/comments/special-purpose-national-bank-charters-for-fintech.pdf (mentioning marketplace/fintech lenders).

^{468.} Neil Ainger, States Gang up to Kill US Fintech Charter and Offer Alternative 'Vision 2020', CNBC (May 15, 2017, 9:30 AM), https://www.cnbc.com/2017/05/15/states-gang-up-to-kill-us-fintech-charter-and-offer-alternative-vision-2020.html.

^{469.} See Lalita Clozel, State Regulators Sue OCC over Fintech Charter, Am. BANKER (Apr. 26, 2017, 10:00 AM), https://www.americanbanker.com/news/state-regulators-sue-occ-over-fintech-charter.

^{470.} See Verstein, supra note 7, at 522 (suggesting that the CFPB should be the appropriate regulator).

^{471.} See Christopher W. Backley, Jeffrey M. Niblack, Cynthia J. Pahl, Terrance C. Risbey & Jeff Vockrodt, License to Deal: Regulation in the Mortgage Broker Industry, FED. RES. BANK OF MINNEAPOLIS (July 1, 2006), https://www.minneapolisfed.org/publications/community-dividend/riskfocused-fair-lending-examinations.

^{472.} See Van Loo, supra note 83 (discussing the focus of federal banking regulators on financial stability and soundness to the exclusion of a focus on competition).

(i.e., cryptocurrency exchange companies and wallet service firms). 473 This effort was lead by industry, the legal academy, and policy makers so as to place regulation of these firms at the state level but with the advantage of having uniformity and creating an environment where the technology could be freely developed. A similar approach would serve as a desirable compromise between the regulator and the regulated in the fintech lending space—and one that might assuage the concerns of federal banking officials and traditional lending institutions who seek a more level playing field between fintech lenders and traditional lenders. In this way, fintech lenders, under the watchful eye of state banking regulators, could continue to grow and innovate. At the same time, mandatory reporting by fintech lenders and regular inspections by state-level regulators would help ensure that consumer interests are being maintained. This would be accomplished through a sandboxing approach to regulation.

Sandboxing is the creation of a set of rules that allow firms to innovate and test their product, service, or business model in a regulatory environment that eases burdens or provides exemptions to existing regulations. The exchange, the regulated firm agrees to operate in a limited fashion and under close regulatory supervision. Fintech lenders would likely welcome such an environment whereby they might be exempted, for example, from typical licensure requirements at the state level and perhaps even some fair lending laws, provided that they allow regulators to closely monitor their processes, including particularly the creation and operation of their machine learning underwriting programs. As noted above, some states might consider creating a back-stop fund to support these regulated firms during the sandboxing period in case they begin to suffer from capital reserve issues.

Using this sandboxing approach, under a uniform law model innovations in consumer and small business lending by fintech lenders (such as in the processing of loan applications, the development of more

^{473.} Peter van Valkenburgh, *The ULC's Model Act for Digital Currency Businesses Has Passed*, COIN CTR. BLOG (July 19, 2017), https://coincenter.org/entry/the-ulc-s-model-act-for-digital-currency-businesses-has-passed-here-s-why-it-s-good-for-bitcoin; *Regulation of Virtual Currency Businesses Act*, UNIF. LAW COMM'N (July 2017), http://www.uniformlaws.org/Committee.aspx?title=Regulation%20of%20Virtual%20Currency%20Businesses%20Act.

^{474.} Jeremy Nation & Jason Civalleri, A Look at the Uniform Regulation of Virtual Currency Businesses Act, ETHNEWS (June 28, 2017, 5:55 PM), https://www.ethnews.com/a-look-at-the-uniform-regulation-of-virtual-currency-businesses-act. A reason for the industry's push for a uniform act was due to the fact that some virtual currency businesses feared being deemed "money transmitters" by various state banking supervisors, which would carry heavy regulatory burdens and even potential criminal liability. See, e.g., CAL. FIN. CODE § 2152(b) (2012).

^{475.} Michele Fink, Blockchain Regulation, 19 GERMAN L.J. (forthcoming 2018).

^{476.} *See id.*; *see also* Hilary J. Allen, A US Regulatory Sandbox? (Oct. 23, 2017) (unpublished manuscript), https://papers.srn.com/sol3/papers.cfm?abstract_id=3056993.

^{477.} See Fink, supra note 475.

predictive underwriting methods, and the quicker delivery of capital) could be nurtured in a controlled way and would serve the dual purposes of bringing new technologies and innovations to consumer markets and protecting public interests. The next article in this series on fintech lenders (and fintech lending more broadly) will address the contours of such a uniform law and regulatory structure.

CONCLUSION

The ability of consumers and small businesses to access credit continues to be a top policy concern for those working toward a full recovery of the American economy. At the same time, in the current low interest rate environment, investors seeking higher yields have opened up the possibility of the deployment of capital into alternative (and riskier) assets. The convergence of these factors has created an economic environment that has allowed fintech platforms to grow and prosper. However, as noted above, many aspects of the inner workings of fintech lending remain unknown. And it is from this lack of understanding that concerns about risk, consumer abuse, and fair lending are born.

Nevertheless, government actors should be careful not to move too quickly and overregulate or misregulate this nascent industry. If managed correctly, the proper oversight of fintech lending by government bodies and industry leaders might open promised avenues of credit for those who traditional banking has not served or has underserved.

^{478.} See id.

^{479.} Report on the Economic Well-Being of U.S. Households in 2015, BD. OF GOVERNORS OF THE FED. RES. SYS. (June 14, 2016), https://www.federalreserve.gov/econresdata/2016-economic-well-being-of-us-households-in-2015-banking-credit-access-credit-usage.htm ("Banking and credit access can be important tools for wealth accumulation and for establishing the resources to withstand short-term economic hardships. The survey finds that lacking a bank account or using alternative financial services is prevalent among lower-income respondents. The results also show that a sizeable minority of those who applied for credit report that they had difficulties getting approved."); see also Monica Langley & Gerard Baker, Donald Trump, in Exclusive Interview, Tells WSJ He Is Willing to Keep Parts of Obama Health Law, WALL St. J. (Nov. 11, 2016), https://www.wsj.com/articles/donald-trump-willing-to-keep-parts-of-health-law-1478895339. In this interview with the Wall Street Journal, Donald Trump decries the Dodd-Frank Act and states that banks are unable to lend money, which is extremely harmful to the well-being of the economy. See id.

^{480.} Steven Hatzakis, Low Interest Rate Environment Makes Alternative Investments More Attractive, YIELDSTREET (Sept. 2016), https://www.yieldstreet.com/blog/article/low-interest-rates; see also Pablo Antolin, Sebastian Schich & Juan Yermo, The Economic Impact of Protracted Low Interest Rates on Pension Funds and Insurance Companies, OECD J. FIN. MKT. TRENDS 1 (2011), http://www.oecd.org/finance/financial-markets/48537395.pdf ("From the perspective of financial stability, the main concern is that insurers and pension funds affected by the lower interest rates will seek higher yields via riskier investments.").

^{481.} See supra Part II.A.

^{482.} See supra Part III.A and accompanying discussion regarding governmental responses.

^{483.} See supra Part III.B.

But while at the same time I urge a slow and cautious approach, the consumer complaints make clear that the process of interfacing with fintech lenders and their products is not always easy or positive. 484 Whether in the process of shopping for a loan, managing a loan, understanding the loan's terms and conditions, or seeking loan modifications in times of financial distress, some consumers report significant difficulties. 485 The narratives from the dataset are important, despite their limitations, because they tell us something about how certain borrowers are using and experiencing fintech loans (something that cannot be easily captured in the more high-level reports of the Treasury Department or from financial analysts). 486 Such data should inform policy making and best practice guideline writing so as to ensure that rules and standards for the industry are based on real (rather than perceived) problems. This means that more research should be conducted on the consumer experience for fintech borrowers, as well as how fintech lenders operate and run their businesses. A harmonized prudential regulatory system would help achieve these goals.

As advances in and our experiences with fintech lenders continue to increase and proliferate, it is important to avoid allowing the technology to get ahead of the law, or allowing regulation to get ahead of innovation. Instead, a balanced and thoughtful approach to building a public, state-level regulatory regime has the potential to encourage the emerging fintech sector to broaden access to affordable credit for small businesses and consumers, particularly those that have been underserved by our traditional lending institutions, while at the same time protecting against credit inequity.

^{484.} See supra Part IV.C.

^{485.} See supra Part IV.C.

^{486.} *See supra* Part IV.C; *see generally* Treasury Report, *supra* note 7; KPMG Report, *supra* note 3; FDIC Commentary, *supra* note 2; Morgan Stanley Report, *supra* note 12; Goldman Sachs Report, *supra* note 35; Milken Report, *supra* note 90.