July 22, 2019

Memorandum

To: Members, Committee on Financial Services

From: FSC Majority Staff

Subject: July 25, 2019, "Examining the Use of Alternative Data in Underwriting and Credit Scoring to Expand Access to Credit"

The Task Force on Financial Technology will hold a hearing entitled, "Examining the Use of Alternative Data in Underwriting and Credit Scoring to Expand Access to Credit," on July 25, 2019 at 10:00 a.m. in Room 2128 of the Rayburn House Office Building. This single-panel hearing will have the following witnesses:

- **Ms. Chi Chi Wu,** Attorney, National Consumer Law Center
- **Mr. Aaron Rieke**, Managing Director, Upturn
- **Ms. Kristin Johnson,** McGlinchey Stafford Professor of Law, Tulane University Law School
- **Mr. Lawrance Evans**, Managing Director of Financial Markets & Community Investment, Government Accountability Office ("GAO")
- **Mr. Dave Girouard**, Founder & CEO, Upstart

Overview

Emerging technologies have rapidly evolved how data is used in lending decisions and credit scoring for consumers. Traditionally, most factors lenders and credit reporting agencies[1] ("CRAs") used to underwrite loans or establish consumers' credit scores have been based on the ability to repay— these include the following factors: payment history, credit utilization, length of credit history, and new credit accounts.[2] This information was then transformed into a numerical score that were used to help make lending decisions. However, among other things, the traditional information used to make lending decisions and establish credit scores does not account for the 26 million consumers without a credit history or the 19 million consumers with short or outdated credit history to form a credit score, groups that are often labeled as "credit invisible" or "un-scorable."[3]

To expand consumer access to credit, lenders and CRAs have started using alternative data to make lending decisions and determine credit scores.[4] However, regulatory uncertainty surrounds the use of alternative data in making lending decisions. While federal law generally prohibits the use of certain

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[1] The three national consumer reporting agencies are Equifax, Experian, and TransUnion.
[2] *See* Cheryl R. Cooper and Darryl E. Getter, "Consumer Credit Reporting, Credit Bureaus, Credit Scoring, and Related Policy Issues," Congressional Research Services ("CRS") (Mar. 28 2019), https://www.crs.gov/Reports/R44125?source=author.
[3] *See* Kenneth P. Brevoort, Philipp Grimm, and Michelle Kambara, "Data Point: Credit Invisibles," Consumer Financial Protection Bureau ("CFPB") (May 2015), http://files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf.
[4] *See* Steven Melendez, "Now wanted by big credit bureaus like Equifax: Your alternative data," FastCompany, (Apr. 6, 2019), https://www.fastcompany.com/90318224/now-wanted-by-equifax-and-other-credit-bureaus-your-alternative-data.

factors (race, religion, or ethnicity, etc.) when making lending decisions, the granularity of alternative data may still harm consumers. Moreover, the GAO has recommended that financial regulators provide clearer guidance to lenders about how to use alternative data in the underwriting process, including issues to consider when selecting types of alternative data to use.[5] There are also questions about the extent consumers are aware of how alternative data may impact their ability to get a loan. For example, it is not clear consumers understand that their online social interactions can affect whether they have access to credit for a home or car loan.[6]

Alternative Data in Financial Services. There is no categorical definition of "alternative data" as it pertains to lending and credit scoring. In the financial services industry, it is commonly referred to as non-traditional data that includes financial and non-financial information. Some commonly used alternative data factors are: (1) utility bill payments, (2) online behavioral data, such as shopping habits, (3) educational or occupational attainment, and (4) social network connections.[7] Financial technology ("fintech") firms utilizing alternative data in financial services source information from the borrower, data aggregators, national databases, and private parties.[8] The influx of new data permits traditional financial service providers to expand credit to the "credit invisible" consumers while accurately assessing default risks. Likewise, banks and credit unions are using alternative data to fight fraud and provide faster access to funds.[9] Despite the potential benefits of alternative data, its use in financial services can also pose risks to protected classes and consumer data privacy. For instance, some lenders may not lend to consumers based on who they associate with on social media.[10] Moreover, as personal and sensitive data is collected and aggregated among various providers, it is unclear how the information is protected in transit and secured while stored on private servers.[11]

Fintech Regulatory Issues with Alternative Data. At the outset, some fintech firms that use alternative data are subject to various degrees of federal oversight. Firstly, because of relationships entered with federally regulated financial institutions, such as banks, fintech firms may be subjected to federal oversight. Here, regulators like the Consumer Financial Protection Bureau ("CFPB") or the Federal Reserve ("Fed"), may examine third-party fintech firms as a part of its oversight of service providers or when examining risk, respectively. Secondly, fintech firms could be subject to federal oversight if the firm applies and receives the Office of Comptroller of the Currency's ("OCC") special-purpose charter or the

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[5] GAO recommended the CFPB, the Fed, FDIC and OCC to communicate in writing to fintech lenders and banks on the appropriate use of alternative data. *See*, "Financial Technology: Agencies Should Provide Clarification on Lenders' Use of Alternative Data," GAO, (reissued with revisions Mar. 12, 2019), https://www.gao.gov/products/GAO-19-111.

[6] Lael Brainard, "The Opportunities and Challenges of Fintech," remarks at the Conference on Financial Innovation at the Board of Governors of the Federal Reserve System, Washington, D.C., (Dec. 2, 2016), https://www.federalreserve.gov/newsevents/speech/brainard20161202a.htm.

[7] CFPB, "Request for Information Regarding Use of Alternative Data and Modeling Techniques in the Credit Process," 82 Federal Register 11185, (Feb. 21, 2017), https://www.federalregister.gov/documents/2017/02/21/2017-03361/request-for-information-regarding-use-of-alternative-data-and-modeling-techniques-in-the-credit.

[8] *See* GAO-19-111, *supra* at 5.

[9] Ken Brevoort and Patrice Ficklin, "New research report on the geography of credit invisibility," CFPB, (Sep. 19, 2018), https://www.consumerfinance.gov/about-us/blog/new-research-report-geography-credit-invisibility.

[10] Carol A. Evans, "Keeping Fintech Fair: Thinking About Fair Lending and UDAP Risk," Federal Reserve System (2017), https://consumercomplianceoutlook.org/2017/second-issue/keeping-fintech-fair-thinking-about-fair-lending-and-udap-risks. Further, research on race-based mortgage discrimination found that among approved loans, minority borrowers pay higher interest rates with both traditional and fintech lenders. For 30-year fixed purchase loans between 2008 and 2012, African-American and Hispanic borrowers were charged 0.08% higher interest rate than other borrowers. *See* Robert Bartlett, Adair Morse, Richard Stanton, and Nancy Wallace, Consumer-Lending Discrimination in the FinTech Era, UC Berkeley Public Law Research Paper (Mar. 19, 2018).

[11] As discussed in the Comptroller General's July 2018 testimony to Congress, cybersecurity breaches pose serious challenges to privacy and to economic, national, and personal security. *See* Statement of Gene L. Dodaro, Comptroller General of the United States, "U.S. consumers. High-Risk Series: Urgent Actions Are Needed to Address Cybersecurity Challenges Facing the Nation," GAO, (Jul. 25, 2018), https://www.gao.gov/assets/700/693405.pdf.

Federal Deposit Incorporation's ("FDIC") Industrial Loan Corporation ("ILC") state-based charter.[12] However, since introducing the program, the OCC has yet to grant a fintech the special-purpose charter and banks have advocated to block fintech ILC's.[13] Thirdly, the CFPB can regulate "larger participant" fintech firms.[14] Currently, firms that are involved with international money transfers, automobile financing, student loan servicing, consumer debt collection, and consumer reporting are covered by various CFPB larger participant rules.[15] Lastly, the CFPB issued its first and only "No Action letter" in 2017 to Upstart, a company that uses alternative data, such as education and employment history, to make credit and pricing decisions.[16]

Further, questions persist about how current laws and regulations should apply to fintech firms using alternative data with respect to credit reporting and credit scoring. The main statute regulating the credit reporting industry is the Fair Credit Reporting Act ("FCRA").[17] FCRA requires CRAs to adopt reasonable procedures to meet the needs of consumer credit in a fair and equitable manner. When examining the furnishing of information by data providers, regulators place great emphasis on confidentiality, accuracy, relevancy, and proper utilization of such collected information.[18] The use of alternative data for CRAs raises FCRA compliance questions because non-traditional sources for data may not meet FRCA data furnishing requirements.[19] New entrants into the data furnishing market also may have issues with accuracy because of how and where the data is potentially collected across the web, and the lack of formal mechanisms for consumer disputes are difficult to track as an aggregator and increases costs.

Moreover, additional clarity may be needed to ensure CRAs, and alternative data collectors comply with the Equal Credit Opportunity Act ("ECOA")[20] and other consumer protection regulations. ECOA generally prohibits discrimination in credit transactions based upon certain protected classes.[21] One pressing issue here relates to "unprotected inferences." While first-party data, i.e. the first bit of data collected, does not infringe upon any of the protected classes, as the data is aggregated and combined with social media data for example, lenders and CRAs are potentially able to infer which protected class a consumer falls into; thus, circumventing ECOA and inviting higher interest rates or other forms of

[12] OCC announced on July 31, 2018, that it would begin accepting applications for national bank charters from nondepository fintech companies engaged in the business of banking. *See* OCC Begins Accepting National Bank Charter Applications From Financial Technology Companies, OCC, (Jul. 30, 2018), https://www.occ.gov/news-issuances/news-releases/2018/nr-occ-2018-74.html; *see also*, Rachel Witkowski, "Square to make another bid for bank charter," American Banker, (Dec 19, 2018), https://www.americanbanker.com/news/square-to-make-another-bid-for-bank-charter.

[13] JD Alois, "After Years of Debate, Avant May be the First to Receive an OCC Fintech Charter," CrowdFund Insider, (Apr. 12, 2019), https://www.crowdfundinsider.com/2019/04/146290-after-years-of-debate-avant-may-be-the-first-to-receive-an-occ-fintech-charter; *see also*, Steven Harras, "Banks seek Congress' help to block fintech path to 'industrial' charters," Roll Call, (Mar. 20, 2019). https://www.rollcall.com/news/congress/banks-seek-congress-help-block-fintech-path-industrial-charters.

[14] *See* Pub. L. No. 111-203, § 1024(a)(1)(B, (2)); *see also*,124 Stat. 1376, 1987 (2010) (codified at 12 U.S.C. § 5514(a)(1)(B)(2)).

[15] CFPB has not defined other larger participants specifically for other markets in which fintech firms may be active, but it has been considering a proposed rule to supervise larger participants in the personal loan markets, which might include larger fintech lenders.

[16] A *No Action letter* is an official communication stating a regulator does not expect to take enforcement actions against companies in certain situations. For more information, *see* CFPB Announces First No-Action Letter to Upstart Network, CFPB, (Sep .14, 2017), https://www.consumerfinance.gov/about-us/newsroom/cfpb-announces-first-no-action-letter-upstart-network.

[17] The Philadelphia Fed suggests alternative data may expand credit access and improve credit terms for some consumers. *See* Julapa Jagtiani and Catharine Lemieux, "The Roles of Alternative Data and Machine Learning in Fintech Lending: Evidence from the LendingClub Consumer Platform," Federal Reserve Bank of Philadelphia, Consumer Finance Institute, (Apr. 2018, revised Jan. 2019), https://www.philadelphiafed.org/-/media/research-and-data/publications/working-papers/2018/wp18-15r.pdf.

[18] 15 U.S.C. §1681.

[19] Lauren Saunders, "Fintech And Consumer Protection: A Snapshot," NCLC, (Mar. 2, 2019), https://www.nclc.org/images/pdf/cons-protection/rpt-fintech-and-consumer-protection-a-snapshot-march2019.pdf.

[20] 15 U.S.C. §§1691-1691f.

[21] Historically, ECOA was interpreted to prohibit both intentional discrimination and disparate impact discrimination However, a 2015 Supreme Court decision involving the Fair Housing Act ("FHA"), sparked debate about whether ECOA covers disparate impact claims.

discrimination based on protected classes.[22] Today, it is not clear if unprotected inferences are contemplated by federal laws and regulations.

Accountability when Using Alternative Data in Lending and Credit Scoring. It is estimated that the use of alternative data by lenders could expand access to credit to over 40 million consumers in the U.S.[23] As internet access increases and data becomes more readily available, marketplace or fintech lenders mostly rely on online platforms and frequently underwrite loans using alternative data.[24] Despite fintech lending serving a small part of the consumer lending market, it has grown quickly. According to the GAO, since 2013, personal loans provided by fintech lenders tripled to about $17.7 billion by 2017.[25]Alternative data used in credit scoring could potentially increase accuracy, visibility, and "scorability" in credit reporting by including additional information beyond that which is traditionally used.[26] Additionally, to help expand mortgage credit access to the credit invisible and un-scorables, consumer advocates have sought to update existing scoring models utilized by Government Sponsored Enterprises.[27]

Weighing the Benefits of Financial Inclusion Versus Unintended Discrimination. To avoid the exclusion of certain demographics, caution may be necessary when using alternative data in expanding the access to credit. The two largest populations of credit invisibles and un-scorables are either African-American or Hispanic millennials that live in lower income neighborhoods.[28] While products using alternative data offer opportunities to better price default risk for lenders and for cheaper credit for some consumers,[29] more transparency about how alternative data is used in credit-making decisions is necessary to ensure inclusion and non-discrimination.[30] For example, there are concerns alternative data sources could result in new ways "to replicate the same legacy of discrimination" in existing financial services products.[31] Further, some consumer advocates have expressed concern that consumers may be evaluated as higher risks using alternative data than they would be with no reports at all.[32]

Data Protection, Transparency, and Security Concerns. The data collected by fintech firms in the financial services industry is sensitive and improper safeguards can lead to serious consumer harm. In 2017, Equifax failed to securely store the dates of birth, Social Security numbers, and physical addresses of 148 million people.[33] For these failures, it is facing $700 million global settlement, one of the largest in US history, with the Federal Trade Commission, the CFPB, and 50 U.S. states and territories.

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[22] *See generally,* Mikella Hurley & Julius Adebayo, *Credit Scoring in the Ear of Big Data*, 18 Yale J.L. & Tech (2017), https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1122&context=yjolt, ("The credit-scoring industry has experienced a recent explosion of start-ups that take an "all data is credit data" approach, combining conventional credit information with thousands of data points mined from consumers' offline and online activities.").

[23] *See* "Financial Technology, Additional Steps by Regulators Could Better Protect Consumers and Aid Regulatory Oversight," (Mar. 2018), at https://www.gao.gov/assets/700/690803.pdf; *see also*, Kenneth P. Brevoort, Philipp Grimm, and Michelle Kambara, *supra* at 3.

[24] CRS Report R44125, *supra* at 2.

[25] For a more detailed discussion of relevant laws fintech lenders must comply with, *see* GAO "Financial Technology: Agencies Should Provide Clarification on Lenders' Use of Alternative Data," (Dec. 2018), pp. 9-10, https://www.gao.gov/assets/700/696149.pdf.

[26] Experian, "New Study Shows How Alternative Payment Data Helps U.S. Consumers' Credit Profiles," (Feb. 25, 2015), https://www.experianplc.com/media/news/2015/alternative-data-to-credit-reports-utilities-and-rent-2015.

[27] *See* Testimony of Chi Chi Wu, *infra* 33.

[28] *See* Kenneth P. Brevoort, *supra* at 3.

[29] *See* Julapa Jagtiani, *supra* 25.

[30] *See e.g.,* FICO, "Product Details," https://www.fico.com/en/products/fico-score-xd.

[31] Steven Melendez, "Now wanted by big credit bureaus like Equifax: Lenders and credit bureaus say a bold new data push can expand credit to more consumers, but some worry the shift could sting the people it's meant to help," Fast Company (April 6, 2019), https://www.fastcompany.com/90318224/now-wanted-by-equifax-and-other-credit-bureaus-your-alternative-data.

[32] *See e.g.,* comments from Ed Mierzwinski, senior director of the federal consumer program at the U.S. Public Interest Research Group.

[33] Tony Romm, "Equifax to pay up to $700 \illion to settle state and federal investigations into 2017 security breach," Washington Post, (July 22, 2019),

Transparency of lending decision-making could provide consumers with the ability to dispute inaccurate information efficiently and safeguard the reliability of the alternative data collected. Today, when data moves from the company collecting the data, it is unclear if third parties and later users can correct inaccuracies after being so far removed. At the same time, it is now more feasible and efficient for financial institutions to gather alternative data from a variety of different sources.[34] One method commonly used to collect alternative data is web-scraping.[35] In financial services, with or without consumer permission, web-scraping is often used to access consumers checking account information to examine cashflow and for example, to collect geographical data about what locations consumers frequent.[36] This translates into lenders using real time analytics for lending decisions.[37] Traditionally, to process data, lenders would have to wait for data to be released in large batches, now as soon as a consumer completes a transaction, the data from that transaction is "scraped" and algorithms consider its usefulness in making lending decisions.

Alternatively, data can be accessed through application program interfaces ("APIs"). Some argue that APIs offer a more secure method of accessing data because of the complex data structure and the need of authentication keys.[38] However, the ease of access to consumer data presents concerns as to how the aggregated data is stored. Combining consumer names with checking account information, shopping habits, and up to tens of thousands of other personal data points without certain safeguards may lead to leaking or misuse of information. [39]

Discussion Draft of The Credit Access and Inclusion Act (Gottheimer)
This bill amends FCRA to clarify Federal law for reporting certain positive consumer credit information to CRAs. This bill is similar to H.R. 435 from the 115th Congress, which sought to expand access to credit through using alternative data. However, this discussion draft addresses several concerns identified by consumer advocates,[40] including removing a provision that would have preempted state laws. Also, the bill requires a two-year study and report from GAO on the impact of furnishing additional information.

Discussion Draft of the "FHA Additional Credit Pilot Program Reauthorization Act" (Green)
This bill reauthorizes a Department of Housing and Urban Development pilot program under FHA that would permit borrowers to opt into utilizing credit scoring models that incorporate alternative data. Authorized for five years, the pilot requires HUD to provide Congress with interim and final reports on the demographics of participating mortgagors; including changes in premiums and interest rates, and whether such changes are found to be a result of the use of alternative data.

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[34] United States Public Interest Research Group, "FinTech and Consumers: A Preliminary Overview of Important Consumer, Privacy, Small Business, and Civil Rights Issues," (May 7, 2018), https://uspirg.org/sites/pirg/files/resources/FintechandConsumers8May18_draft.pdf.
[35] U.S. Department of Treasury, "A Financial System That Creates Economic Opportunities: Nonbank Financials, Fintech, and Innovation," (Jul. 2018), pp. 25-39, https://home.treasury.gov/sites/default/files/2018-08/A-Financial-System-that-Creates-Economic-Opportunities---Nonbank-Financials-Fintech-and-Innovation_0.pdf.
[36] *Id.*
[37] *See generally*, Hiren Patel, "How Web Scraping is Transforming the World with its Applications," Towards Data Science, (Dec. 31, 2018), https://towardsdatascience.com/https-medium-com-hiren787-patel-web-scraping-applications-a6f370d316f4.
[38] *Id*; *see also*, Renata Budko, "Five Things You Need to Know About API Security," The New Stack, (May 31, 2018), https://thenewstack.io/5-things-you-need-to-know-about-api-security/.
[39] July 2017 breach at Equifax, which resulted in the loss of personal information of an estimated 148 million U.S. consumers.
[40] Letter from National Consumer Law Center et al to U.S. House of Representatives regarding H.R. 435 (115th Congress), https://nclc.org/images/pdf/legislation/letter-oppose-hr435-hfsc.pdf.