

Data as sword and shield: How regulated entities in the banking and securities industries can utilise data analytics to improve compliance and manage enforcement risk

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ABSTRACT

This article examines the role of Big Data in the regulation of the consumer finance and securities industries in the United States. Because many major international financial institutions are located in New York, this paper discusses the role of both federal and New York state regulators. These regulators increasingly rely on data to conduct risk analyses and shape examination priorities, which, in turn, can lead to investigations and enforcement actions (that are also increasingly driven by data analysis). This article also discusses regulators' expectations regarding the role of data analytics in the development of effective compliance programmes and how regulated entities can leverage data to proactively address issues before they become subject to regulatory scrutiny, and use this information during the course of examinations, investigations and enforcement actions.

Keywords: *Data analytics, banking regulation, securities regulation, enforcement*

INTRODUCTION

Participants in the banking and securities industries have long recognised the increasingly important role that data analytics plays in the regulatory process. The USA's authorities, at both the federal and state levels, routinely tout their abilities to employ sophisticated

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analytics to determine priorities, set policy and pursue complex wrongdoing. In an era in which regulators have demonstrated a willingness to pursue violations of law based largely on data anomalies, regulated entities must respond by incorporating data analytics into their compliance and supervisory programmes to better enable them to prevent and detect potential violations before they become the subject of regulatory and enforcement scrutiny.

The first section of this paper provides an analysis of the use of data analytics by consumer finance regulators; the second section, titled ‘Securities regulators’ use of data in the examination and enforcement process’, provides the same analysis with respect to securities regulators. The third section, ‘Data as a shield: The use of data analytics prior to the enforcement process’, explores how regulated entities can proactively use data to enhance their compliance and supervisory programmes and minimise the risk of regulatory scrutiny. The final section offers guidance regarding how entities can most effectively employ data analytics during the regulatory enforcement process.

Consumer finance regulators’ use of data in the supervisory and enforcement processes

Several regulators share jurisdiction over the consumer finance industry in the USA. The Office of the Comptroller of the Currency (OCC) is the prudential regulator for national banks, while state regulators, including the New York State Department of Financial Services (DFS or ‘the Department’), share supervision of state-chartered banks with either the Federal Reserve or Federal Deposit Insurance Corporation (FDIC), depending on whether the bank is a Federal Reserve member bank. In addition, the Consumer Financial Protection Bureau (CFPB) supervises banks with over US\$10bn in assets for compliance with federal consumer financial laws. State regulators are the

primary licensing authorities for non-depository consumer finance entities, although the CFPB has concurrent jurisdiction over larger participants in several consumer finance markets, including motor vehicle financing. These regulators lean heavily on data analysis to determine which consumer finance products, and which regulated entities, they will prioritise for supervision.

Consumer finance regulators are increasingly focused on regulated entities’ compliance with fair lending laws, including the Equal Credit Opportunity Act (ECOA) and its implementing regulation, Regulation B, the Fair Housing Act (FHA), and state fair lending laws, such as New York Executive Law § 296-a.¹ Collectively, these laws prohibit credit discrimination on the basis of race, colour, religion, national origin, sex, gender expression or identity, marital status and age, among other prohibited bases. Regulators’ recent public enforcement actions, reports and statements suggest that they are particularly focused on potential discrimination in the mortgage and motor vehicle finance markets.

Data analysis is perhaps the most important component of fair lending compliance. However, the amount and complexity of data that regulators and regulated entities have access to differs materially for mortgage lending compared to all other consumer finance products. For mortgage lending, the Home Mortgage Disclosure Act (HMDA) requires most regulated entities that originate consumer mortgages to maintain, report and publicly disclose loan-level data about mortgages, including the race, ethnicity and gender of applicants and co-applicants. Regulators use this detailed and accessible mortgage data to select regulated entities for fair lending examinations, according to risk-based criteria. By contrast, consumer lenders are generally prohibited from collecting demographic data from applicants for financial products other than mortgages, and such products are not subject

to the same data reporting requirements.² As a result, regulators and regulated entities that conduct their own data analyses on consumer finance products other than mortgages typically use proxy methodologies to identify whether applicants and borrowers are members of a protected class. Following a White Paper published by the CFPB in 2014, the most commonly used proxy is Bayesian Improved Surname Geocoding (BISG), which assigns a probability for race and ethnicity based on geography and surname.³ Although some commentators have criticised BISG as unreliable,⁴ regulators continue to use it as a tool in both examinations and investigations.

A series of recent public actions by the DFS provides a window into how regulators use data to shape fair lending supervision, enforcement and policy. In 2020 and 2021, the DFS used HMDA data to conduct a detailed analysis of mortgage lending in New York State and published a report summarising the Department's findings and recommending policy changes.⁵ The DFS analysis focused on identifying potential redlining, a form of discrimination in which a lender provides unequal access to credit, or unequal terms of credit, because of the prohibited basis characteristics of residents in an area where an applicant resides, will reside or in which the residential property to be mortgaged is located. The DFS focused on two metrics: the percentage of mortgages a lender originated in neighbourhoods mainly comprising an ethnic minority population and the percentage of mortgages a lender originated to ethnic minority homebuyers. The report subsequently found that several lenders were making significantly fewer loans in these neighbourhoods and to such borrowers than comparable lenders. This analysis led the DFS to launch several investigations into mortgage lenders that underperformed as compared to peers, including one investigation that was resolved through an agreement in which a

non-depository mortgage lender committed to take a series of steps intended to improve its lending performance. In the agreement, as well as in portions of the report describing the findings of the Department's analysis of the compliance programmes of other mortgage lenders, the DFS emphasised that lenders with disproportionately lower lending to minority borrowers and in mainly minority neighbourhoods typically had not conducted any significant analysis of their mortgage lending data. These lenders were, therefore, unable to identify that they were engaged in conduct that could lead to regulatory scrutiny and were not able to implement corrective action to proactively address this conduct.

Federal regulators and prosecutors have also increased efforts to identify redlining. Since August 2021, the Department of Justice (DOJ) and the CFPB have initiated two enforcement actions alleging that banks engaged in redlining, both of which include civil money penalties and other monetary relief.⁶ Both enforcement actions arose directly out of referrals from the OCC based upon statistical analyses conducted in connection with fair lending examinations focused on redlining, and relied in significant part on metrics similar to those highlighted in the DFS report and agreement: the banks received a disproportionately low number of mortgage loan applications from, and originated a disproportionately low number of mortgage loans in, mainly minority neighbourhoods.

Regulators and prosecutors have also begun to expand the scope of redlining analyses to non-depository institutions. Traditionally, redlining analyses focused almost exclusively on banks with brick-and-mortar branches and relied on a review of banks' lending metrics and the geographic areas in which banks locate branches and provide financial products. Although regulators in recent years have begun reviewing non-depository lenders for potential redlining

through the confidential supervisory process, no regulator had taken public action alleging that a non-depository lender engaged in redlining, and neither, for that matter, had a regulator clearly and publicly articulated how it would review non-depository lenders' practices for potential redlining. This public silence has markedly changed very recently. In 2020, the CFPB filed the first public enforcement action alleging that a non-depository mortgage lender engaged in redlining.⁷ Although the CFPB's complaint recounted certain public statements of the lender's principals that allegedly discouraged prospective minority applicants from applying for mortgage loans, the complaint also focused in significant part on the lender's disproportionately low level of lending to minority borrowers and in mainly minority neighbourhoods. Similarly, the DFS study of the New York mortgage market discussed potential disparities in non-depository institutions' lending to minority borrowers and in mainly minority neighbourhoods, and the sole public agreement (as of the date of publication of this paper) arising out the DFS study and related investigations is with a non-depository lender. Most recently, on 22nd October, 2021, the DOJ announced a new redlining initiative that will include review of non-depository lenders' practices.⁸ Non-depository mortgage lenders must now be prepared for significantly increased regulatory scrutiny of potential redlining, which will be grounded in regulators' analysis of HMDA data.

Consumer finance regulators have also signalled a renewed focus on potential discrimination in the motor vehicle finance market. From 2013 to 2016, the CFPB brought a series of enforcement actions against banks and non-depository finance companies involved in indirect motor vehicle lending based on data analyses that found protected class borrowers were charged higher 'dealer markups'⁹ than non-protected

class borrowers.¹⁰ Despite criticism that these enforcement actions relied on arguably flawed and oversimplified theories of liability, and Congress's repeal of a 2013 CFPB bulletin describing these disparities as potential fair lending violations, regulatory scrutiny of this practice has continued. Indeed, following a period of several years in which regulators took no public action involving dealer markups, in the past two years multiple regulators brought enforcement actions alleging fair lending violations based on statistical disparities in dealer markups.

In June 2021, the DFS entered into consent orders with two banks after alleging, through analyses of the banks' lending data, that protected class borrowers were charged higher dealer markups than non-protected class borrowers.¹¹ In addition, when the CFPB's new director, Rohit Chopra, was a commissioner for the Federal Trade Commission (FTC), the FTC alleged in an enforcement action, among other things, that a car dealer violated the ECOA and Regulation B by charging higher markups to protected class borrowers than non protected class borrowers. These enforcement actions were based on the disparate impact theory of fair lending liability, through which facially neutral policies or practices may nevertheless lead to fair lending violations if the policies or practices result in disproportionate outcomes — typically identified through data analysis — for protected classes. In a statement supporting the enforcement action, Mr Chopra described disparate impact analysis as 'a critical tool to uncover hidden forms of discrimination'.¹² The CFPB is likely to deploy the disparate impact theory of fair lending liability aggressively under Mr Chopra's leadership and will rely heavily on data analysis in such actions.

Regulators have signalled that they are extremely focused on identifying potential discrimination in consumer finance markets, which will be driven by, and depend

on, data analytics. Regulated entities should take note of regulators' stated priorities and continue to develop data-driven compliance programmes.

Securities regulators' use of data in the examination and enforcement process

The Securities and Exchange Commission (the SEC, or The Commission) is the primary authority responsible for regulating the securities markets and policing the securities industry in the USA. The SEC oversees financial reporting by public companies, and regulates the activities of broker-dealers, investment advisers, transfer agents, and other entities. The agency's law enforcement function is vested in its Division of Enforcement, which often coordinates with federal and state criminal authorities. The securities regulatory regime also relies on a self-regulatory framework, through which the SEC regulates various self-regulatory organisations (eg FINRA, national securities exchanges) and those entities, in turn, oversee securities industry participants. On top of this federal regime, each state also has its own securities regulatory authority, which enforces state securities laws, generally known as 'blue sky' laws. New York's Martin Act is widely regarded as creating the strictest securities regulation framework at the state level.

Entities at each of these levels — federal, self-regulatory and state — also rely heavily on Big Data to implement their regulatory mandates. On the SEC front, the Division of Examinations employs data analytics to establish priorities and allocate its scarce resources to inspect the more than 28,000 entities registered with the Commission.¹³ As the Division of Examinations made clear in its 2021 Examination Priorities, the staff 'plan[s] to build upon existing work in predictive modelling and text-based analytics to improve [its] examination processes and identify risks and outlier activities correlated with compliance and control risks'.¹⁴ One of

the most well-known efforts of the Division of Examination in that regard is the creation of the National Exam Analytics Tool (NEAT), which rapidly analyses voluminous trading data to detect a wide array of illicit activity, including insider trading, violations related to suitability, front running, money laundering, and supervisory failures.¹⁵ NEAT's ability to automatically analyse in minutes what formerly required weeks or months of an examiner's time has drastically improved the efficiency and effectiveness of the SEC's examination programme.

Over the past decade, data analytics have become a central component of the SEC's enforcement programme and the agency's efforts in enforcement actions spanning the spectrum of securities-related misconduct, including market manipulation, insider trading and accounting violations. The crown jewel of the SEC Enforcement Division's data analysis capabilities is the Market Abuse Unit (MAU). Formed in 2010, the MAU targets complex insider trading rings, market manipulation and other sophisticated misconduct threatening the integrity of the financial markets. The unit is staffed by enforcement attorneys across the SEC's offices, as well as industry specialists — former traders, quantitative analysts and experts from other law enforcement agencies — with the mission of ferreting out the market's most sophisticated misconduct.

To that end, MAU created the Analysis and Detection Center (the ADC), which has the primary mission of employing data analytics to detect suspicious trading patterns. In analysing market data, the staff of the ADC operates according to the theory that, over the long term, unusually high levels of trading profits are likely to be indicative of misconduct rather than skill. Market participants — and their counsel — must therefore be mindful of the fact that the MAU is willing to commence investigations based solely on a large sample size of profitable trading.

Since its inception, the MAU — and its data analytics capabilities — has been the driving force behind many of the agency’s headline-grabbing enforcement actions. For example, from 2015 to 2019, the SEC charged over 40 defendants in connection with a scheme to hack into the SEC’s EDGAR database and trade based on illicitly obtained corporate earnings information. In announcing the first of these actions, the then-SEC Enforcement Director stated that, ‘[t]his cyber hacking scheme is one of the most intricate and sophisticated trading rings that we have ever seen, spanning the globe and involving dozens of individuals and entities’, and added that the MAU’s ‘use of innovative analytical tools to find suspicious trading patterns and expose misconduct demonstrates that no trading scheme is beyond our ability to unwind’.¹⁶

More recently, in June 2021, the SEC brought insider trading charges against a Silicon Valley-based insider trading ring that generated US\$1.7m in illicit profits, involved unlawful trading in the securities of two issuers and lasted for over a year. When the SEC brought this enforcement action — in parallel with a criminal case brought by the United States Attorney’s Office for the Northern District of California — the Chief of the MAU touted the ‘sophisticated data analysis’ that the SEC used ‘to uncover th[e] insider trading ring and hold each of its participants accountable to ensure the integrity of the markets’.¹⁷

Although the MAU may have pioneered the SEC Enforcement Division’s use of data analytics, sophisticated data analyses have become a mainstay of the Enforcement Division in recent years. In September 2020, the SEC brought its first set of cases that resulted from its ‘Earnings Per Share’ initiative, which uses risk-based analytics to identify accounting violations resulting from, among other things, earnings management practices.¹⁸ In one of these cases, the improper adjustments at issue increased the issuer’s earnings per share (EPS) by just one penny for one financial quarter, which enabled the company to

meet analyst guidance. In the second case, the SEC charged the company’s chief financial officer and chief accounting officer and imposed substantial monetary penalties and bars on both individuals.¹⁹

It is worth noting that the SEC enforcement staff also works closely with the Commission’s other divisions and offices to analyse data. One of the primary roles of the economists in the SEC’s Division of Economic and Risk Analysis (DERA) is to ‘develop[...] customized analytical tools and analysis to proactively detect market risks indicative of possible violations of the Federal Securities Laws’.²⁰ DERA’s subject matter experts and data scientists routinely support the staff of the Enforcement Division by using advanced analytical tools to detect misconduct.

Building on these efforts, the SEC Enforcement Division recently created the Environmental, Social, & Governance (ESG) Task Force, and has indicated that the ESG Task Force will rely heavily on analytics to identify related disclosure violations and misconduct. Of note, the Commission’s announcement of the creation of its ESG Task Force emphasised that the staff will use ‘sophisticated data analysis to mine and assess information across registrants, to identify potential violations’.²¹ Given the importance of ESG issues to the Commission’s overall agenda, data-driven enforcement actions are likely to arise from this initiative in the near future.

The core philosophy underpinning the Enforcement Division’s reliance on data analytics is that on a long-term scale, unusually high success rates present sufficient indicia of misconduct to warrant devoting scarce investigative resources. Institutional investors that profitably trade in advance of earnings for five quarters are lucky; if that streak extends for five years, they are likely to be trading on the basis of material non-public information. An investment advisory client who outperforms other clients of the same adviser over five transactions is lucky; if the success rate continues

over fifty transactions, the adviser is likely to be engaging in a ‘cherry-picking’ scheme. Companies that narrowly meet guidance for one reporting period are well managed; if the trend continues over a full year, the company is likely to be ‘managing’ earnings.

Owing to the importance of data analysis in the surveillance of the securities markets, in July 2012, the SEC directed the securities self-regulatory organisations to create a consolidated audit trail (CAT) that would strengthen the ability of the self-regulatory organisations (and the SEC) to oversee the industry. The CAT became operational on 22 June, 2021, and because it will eventually contain comprehensive data for every equity and options transaction in the USA’s securities markets, this database will enhance the ability of the self-regulatory organisations (and the SEC) to carry out their regulatory enforcement missions.

Finally, the Office of the New York Attorney General has substantially expanded its data analysis capabilities. This investment will enable the office — widely considered to be the most aggressive state securities regulator in the country — to investigate and prosecute increasingly complex misconduct.²²

Data as a shield: The use of data analytics prior to the enforcement process

This section and the one that follows discuss how regulated entities can and should employ data analytics to proactively identify risk and mitigate the impact of investigations and enforcement actions. Financial services regulators’ recent statements and actions provide useful insight into regulators’ evolving use of data analytics, as well as their expectations for how regulated entities should employ data as a key component of a sound compliance programme. The first step that regulated entities can take is to implement proactive data analyses, which can reduce the risk that regulators will have negative examination findings that could lead to a costly investigation or enforcement action.

Proactive use of data analysis to shape compliance programmes

While proactive data analysis is a necessary component of a sound compliance programme for almost any entity subject to supervision by a regulatory authority, it is particularly critical for regulated entities in the securities and consumer finance industries. The starting point for any effective use of data in a compliance programme is ensuring the integrity of data collected. Regulated entities should consider periodically testing their data for accuracy, and should identify and address the root cause of any systemic inaccuracies. Regulated entities that maintain accurate data will gain an added benefit of being prepared for future examinations and investigations, which may result in long-term time and cost savings.

Mortgage lenders, in particular, must ensure that HMDA data collected and reported is accurate. Because the act requires such information to be accurate, lenders whose HMDA data contains inaccuracies could be subject to regulatory action for those inaccuracies alone. For example, in 2019 the CFPB took enforcement action resulting in a significant civil monetary penalty against a non-depository mortgage lender that allegedly intentionally reported inaccurate race, ethnicity and sex information.²³ Although this allegedly intentional conduct is an extreme example, lenders acting in good faith that nevertheless report inaccurate information have also been cited for HMDA violations as a part of the confidential supervisory process. These lenders have had to spend time and incur significant costs to correct inaccurate information.

In addition to ensuring that their data is accurate, regulated consumer finance entities should consider conducting regular substantive data analyses, including regression analyses, to identify potential risk. If these analyses reveal disparities between protected class applicants or borrowers and non-protected class applicants or borrowers, regulated entities should consider prompt corrective action. This may

include reviewing underwriting and pricing processes and, if appropriate, adjusting pricing or other terms of loans. For example, following regulators' enforcement actions involving dealer markups, some entities with large motor vehicle finance portfolios now regularly use BISG in connection with analyses of whether protected class borrowers have been charged higher dealer markups than non-protected class borrowers and adjust charges if they discover statistically significant disparities. This proactive analysis has had concrete, positive results. Institutions that have implemented this control have avoided potential regulatory action by demonstrating to regulators their processes and ensuing corrective actions taken.

Likewise, regulated entities in the securities industry should use data analytics to ensure compliance with their supervisory obligations under Section 15(g) of the Securities Exchange Act of 1934 and Section 204A of the Investment Advisors Act of 1940. Given the advanced array of available analytical tools, the SEC and its staff expect that sophisticated entities will incorporate data analytics into their compliance programmes, and could conceivably view a failure to do so as falling short of the 'reasonable' supervision required under the securities laws.²⁴ Regulated entities that can demonstrate regular data analyses and have documented appropriate adjustments based on those analyses may be able to reduce time and expenses associated with regularly scheduled examinations and will be better positioned to respond to, and reduce, the impact of investigations, should they occur.

Data as a sword: How data analytics drive the enforcement process

Even regulated entities with effective and data-driven policies, procedures, systems and controls may end up the subjects of an examination or investigation. When a company receives an enquiry from a regulator, the focus must shift from the use of data as a

prophylactic measure to leveraging data for its persuasive value — ie, to convince regulators and enforcement authorities that an enforcement action is not warranted or to mitigate the consequences of any potential violations.

When to use data analytics to defend against an investigation or enforcement action

The first issue to be considered by regulated entities when using data in the course of an investigation is timing. While the determination of whether to share the results of any analyses will necessarily depend on the facts and circumstances, it is never too early to start developing arguments based on data analytics and to consider sharing the results with enforcement authorities.

Regulated entities and their counsel often wait until the end of an investigation to share data-based arguments with enforcement staff. While this approach may be appropriate in certain circumstances — for example, if the scope of the government's investigation is uncertain — in many cases, both the regulated entity and the regulator will have an interest in sharing data analyses early in an investigation. As discussed above, the SEC staff often opens insider trading investigations based solely on data demonstrating disproportionate trading profit over a reasonably large sample size.²⁵ In those instances, the entity subject to the staff's enquiry may want to conduct analyses contextualising the purportedly suspicious trading by examining (among other things): (i) how the size of the suspicious transaction(s) compare to the entity's trading generally; (ii) whether the type of security involved (eg equities, options) was anomalous for the entity; (iii) how the trading compares to transactions in other accounts associated with the entity; (iv) whether the transactions are consistent with the entity's trades in the securities of other issuers within the same industry or sector; and (v), how the purportedly suspicious trading compares with information contained within the company's research files.

If the results of data analyses suggest that purportedly suspicious trading is not, in fact, suspicious, the regulated entity should consider sharing that with the regulator early in the investigative process. If successful, the company may receive the benefit of minimizing costs associated with defending against a protracted investigation and reducing the likelihood that the enforcement authorities will identify additional suspicious conduct during an investigation. Additionally, it is often easier for line-level investigative staff to justify to their supervisory chain closing an investigation at its early stages than when an investigation is more advanced.²⁶

Regulated consumer finance entities facing an investigation into potential fair lending violations should also consider sharing data analyses early in the process. This is particularly true when an entity has been proactively conducting its own analyses for the period under investigation, and those analyses demonstrate that potential disparities are explained by credit characteristics or other neutral, non-discriminatory factors. In some cases, regulators may initiate fair lending investigations based on raw disparities in lending data and have not yet considered such factors. Moreover, regulators may not have considered, or had access to, entities' underwriting or pricing models in order to conduct more detailed analyses. Entities that can demonstrate proactive monitoring of their portfolios, and that potential disparities are based on non-discriminatory factors, may be able to convince regulators that investigations should be concluded without a public enforcement action.

Who should conduct data analyses?

Large and sophisticated institutions often employ their own data analysts and economists, many of whom are likely to possess the experience and skillset required to analyse data for use in a regulatory investigation. But regulated entities facing investigations may also want to consider retaining external

consultants to conduct these analyses, particularly if they plan to present the results and conclusions to regulators.

Using outside experts can confer at least two significant advantages. First, external consultants — particularly those who are routinely retained as experts — are likely to have more experience in conducting the precise types of analyses that are relevant to regulatory investigation. Secondly, and more importantly, enforcement authorities are likely to consider analyses performed by external consultants to be more credible, and ultimately more persuasive. This is particularly true if the expert has experience in conducting analyses on behalf of both private entities and government authorities. Additionally, regulatory authorities tend to have a favourable view of experts with an academic background. If a regulated entity does opt to retain an external consultant, the engagement should be initiated by counsel, and the engagement letter should explicitly state that the expert is being retained to assist counsel in providing legal advice to the entity.

What should entities provide to the government?

Once an entity decides on retaining expert consultants, conducts the analyses, and then makes the strategic decision to share the results with the government, the regulated entity must then determine the form and substance of data to share. On the one hand, the company can opt to share only the bottom-line conclusion. This is likely to have minimal persuasive value, although it might be an appropriate strategy for data analyses that regulators can readily replicate. Alternatively, entities might also opt to share all aspects of the analysis, including a detailed description of the methodology, any assumptions underlying the analysis, the parameters regarding which data was included, the results of the analysis, and a detailed discussion of any conclusions. Enforcement authorities are likely to consider this approach to be more credible

and to accord more weight to any ensuing conclusions.

Of course, sharing more information with the government is not without its risks. One potential pitfall involves inadvertently (or knowingly) providing the government with privileged information and the likelihood of a court finding that doing so effected a broader waiver. For that reason, companies and their counsel must carefully weigh the potential costs and benefits of sharing the results of any analysis with the government. Another risk of sharing more information than necessary is the additional opportunities for regulators' in-house experts to raise methodological questions that could invalidate favourable conclusions. To allay this concern, companies should consider making their consultants available to meet with the enforcement staff and respond in real time to any questions.

Finally, regulated entities should be mindful of the fact that, under applicable SEC guidance, voluntarily providing investigative authorities with additional information is likely to weigh in favour of receiving coveted 'cooperation credit'.²⁷ This credit provides incentives to regulated entities to participate in SEC investigations and enforcement matters, and can result in reduced charges and sanctions, or even no action by the Commission.²⁸ The opportunity for such credit is particularly applicable in instances in which the results of data analyses indicate that the regulated entity may have violated applicable law. The SEC's long-standing guidance on cooperation by regulated entities provides that the Commission considers the extent to which the company provided helpful information to the SEC staff and how much information the company voluntarily disclosed that the agency might not have otherwise detected.²⁹

CONCLUSION

Financial services regulators at both the federal and state levels are increasingly using Big Data to shape their supervisory priorities

and initiate investigations and enforcement actions. Regulated entities should, likewise, be incorporating data analyses into their compliance programmes, both to proactively identify possible law violations and to be positioned to defend against, and mitigate, the impacts of investigations or enforcement actions. While there is no single method of data analysis that fits all regulated entities, these businesses should be developing, implementing and regularly updating data solutions that are tailored to their risk, compliance requirements and business operations. By preparing these systems now, regulated entities can potentially avoid, or greatly mitigate, the costs and impacts of investigations and enforcement actions.

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REFERENCES AND NOTES

- (1) Equal Credit Opportunity Act (ECOA), 15 U.S.C.A., ch 41, § 1691 *et seq.*; Fair Housing Act (FHA), § 801 *et seq.*, 42 U.S.C.A. § 3601 *et seq.*; McKinney's Consol. Laws of N.Y., Exec. Law § 296-a (2019).
- (2) The CFPB has proposed a rule to implement Section 1071 of the Dodd-Frank Act, which amended the ECOA to mandate data collection and reporting for financial institutions making small business loans. See CFPB, 'CFPB Proposes Rule to Shine New Light on Small Businesses' Access to Credit', available at <https://www.consumerfinance.gov/about-us/newsroom/cfpb-proposes-rule-to-shine-new-light-on-small-businesses-access-to-credit/> (accessed on 1st September, 2021). Although not the subject of this article, financial institutions that make small business loans should begin preparing for HMDA-style collection and reporting requirements for small business lending.
- (3) CFPB (2014), 'Using Publicly Available Information to Proxy for Unidentified Race and Ethnicity', available at: https://files.consumerfinance.gov/f/201409_cfpb_report_proxy-methodology.pdf (accessed on 16th June, 2022).
- (4) See, eg Arthur P. Baines & Dr. Marsha J. Courchane Charles River Associates (19th November, 2014), 'Fair Lending: Implications for the Indirect Auto Finance Market', <https://media.crai.com/sites/default/files/publications/Fair-Lending-Implications-for-the-Indirect-Auto-Finance-Market.pdf> (accessed on 16th June, 2022).

- (5) DFS, *Report on Inquiry into Redlining in Buffalo, New York*, 4 February, 2021. https://www.dfs.ny.gov/system/files/documents/2021/02/report_redlining_buffalo_ny_20210204_1.pdf (accessed on 16th June, 2022).
- (6) DOJ, Office of Public Affairs, 'Justice Department Announces New Initiative to Combat Redlining', available at <https://www.justice.gov/opa/pr/justice-department-announces-new-initiative-combat-redlining> (accessed on 1st November, 2021).
- (7) See <https://www.consumerfinance.gov/about-us/newsroom/cfpb-files-suit-against-mortgage-creditor-discriminatory-mortgage-lending-practices/> (accessed on 16th June, 2022).
- (8) Department of Justice, Office of Public Affairs, 'Justice Department Announces New Initiative to Combat Redlining', available at: <https://www.justice.gov/opa/pr/justice-department-announces-new-initiative-combat-redlining> (accessed on 1st November, 2021).
- (9) In many vehicle sales, the car dealer will arrange financing through a third-party lender or sales finance company that will offer to provide financing for the purchase of the vehicle at a specified interest rate. In some cases, the car dealer will increase this interest rate when presenting the financing offer to the buyer. This practice is known as dealer participation, or dealer markup. Regulators have asserted that the amount of the dealer participation or markup is often discretionary and relied on this assertion in bringing fair lending enforcement actions.
- (10) See, eg, CFPB (20th December, 2013), 'CFPB and DOJ Order Ally to Pay \$80 Million to Consumers Harmed by Discriminatory Auto Loan Pricing', available at <https://www.consumerfinance.gov/about-us/newsroom/cfpb-and-doj-order-ally-to-pay-80-million-to-consumers-harmed-by-discriminatory-auto-loan-pricing/> (accessed on 16th June, 2022).
- (11) DFS (29th June, 2021), 'DFS Superintendent Laceywell Announces Settlements with Two Upstate Banks to Resolve Fair Lending Violation', available at https://dfs.ny.gov/reports_and_publications/press_releases/pr202106291 (accessed on 16th June, 2022).
- (12) FTC (27th May, 2020), 'Statement of Commissioner Rohit Chopra in the Matter of Liberty Chevrolet, Inc. d/b/a Bronx Honda', available at <https://www.ftc.gov/public-statements/2020/05/statement-commissioner-rohit-chopra-matter-liberty-chevrolet-inc-dba-bronx> (accessed on 16th June, 2022).
- (13) SEC 'Statement on the Renaming of the Office of Compliance Inspections and Examinations to the Division of Examinations', [sec.gov](https://www.sec.gov) (accessed on 3rd November, 2021).
- (14) SEC (2021), 'Examination Priorities Division of Examinations, 2021 Examination Priorities Report', [sec.gov](https://www.sec.gov) (accessed on 3rd November, 2021).
- (15) SEC 'SEC Accomplishments', [sec.gov](https://www.sec.gov) (accessed on 3rd November, 2021).
- (16) See SEC, Press Release 'SEC Charges 32 Defendants in Scheme to Trade on Hacked News Releases', [sec.gov](https://www.sec.gov) (accessed on 3rd November, 2021).
- (17) See SEC, Press Release, 'Six Charged in Silicon Valley Insider Trading Ring', [sec.gov](https://www.sec.gov) (accessed on 3rd November, 2021).
- (18) See SEC (2021), Press Release, 'SEC Charges Companies, Former Executives as Part of Risk-Based Initiative', [sec.gov](https://www.sec.gov) (accessed on 3rd November, 2021).
- (19) See SEC, 'Order Instituting Public Administrative and Cease-and-Desist Proceedings Pursuant to Section 8a of The Securities Act Of 1933, Sections 4c and 21c Of The Securities Exchange Act Of 1934, And Rule 102(E) Of The Commission's Rules Of Practice, Making Findings, And Imposing Remedial Sanctions And A Cease-And-Desist Order Interface, Inc. et al', [sec.gov](https://www.sec.gov). (accessed on 3rd November, 2021).
- (20) See SEC, 'About the Division of Economic and Risk Analysis', [sec.gov](https://www.sec.gov) (accessed on 4th November, 2021).
- (21) *Ibid.* (accessed on 4th November, 2021).
- (22) See, eg 'A.G. Underwood Announces \$65 Million Settlement With Wells Fargo For Misleading Investors Regarding Cross-Sell Scandal' (22nd October, 2018), New York State Attorney General ([ny.gov](https://www.ny.gov)) (noting the role of Office of the New York Attorney General's 'Research and Analytics Department'), available at <https://ag.ny.gov/press-release/ag-underwood-announces-65-million-settlement-wells-fargo-misleading-investors> (accessed on 16th June, 2022).
- (23) CFPB (5th June, 2019), 'Consumer Financial Protection Bureau Settles with Freedom Mortgage Corporation', available at <https://www.consumerfinance.gov/about-us/newsroom/bureau-settles-freedom-mortgage-corporation/> (accessed on 16th June, 2022).
- (24) See Exchange Act, Section 15(g); Advisors Act, Section 204A; see also FINRA Rule 2100 (requiring broker-dealers to create a supervisory system that 'is reasonably designed to achieve compliance with applicable securities laws and regulations, and with applicable FINRA rules').
- (25) Of course, the meaning of 'disproportionate' and 'reasonably large sample size' will depend on the staff attorney and analyst reviewing the data.
- (26) Compare SEC Enforcement Manual at Section 2.3.2 (describing procedures for closing a 'Matter Under Inquiry') with *ibid.* at 2.6 (describing procedures for closing an investigation).
- (27) Although other regulatory enforcement agencies (and prosecutors) provide cooperation credit, we rely on the SEC's guidance as illustrative.
- (28) See SEC, 'Spotlight on Enforcement Cooperation Program', available at <https://www.sec.gov/spotlight/enforcement-cooperation-initiative.shtml> (accessed on 5th November, 2021).
- (29) See SEC, 'Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934 and Commission Statement on the Relationship of Cooperation to Agency Enforcement Decisions', [sec.gov](https://www.sec.gov) (accessed on 3rd November, 2021).