

MAYER • BROWN

Use Artificial Intelligence to Open New Markets & Avoid a Meltdown

Melanie Brody

Partner

202.263.3304

mbrody@mayerbrown.com

Alex C. Lakatos

Partner

202.263.3312

alakatos@mayerbrown.com



November 2018

Consumer Finance

MONTHLY BREAKFAST BRIEFING

Overview



- Introduction
- Fair Credit Reporting Act
- Model Validation
- Fair Lending
- AI for Due Diligence
- Questions

Introduction



- Most credit decisions and pricing determinations are still based heavily on information in credit reports generated by three national consumer reporting agencies
- Therefore, consumers who have limited or no credit history can have difficulty obtaining credit
- However, a large number of consumers are either:
 - Credit invisible, i.e., they do not have a credit report
 - Unscored, i.e., they do not have enough credit history to generate a score or their credit history is stale

Introduction



- The CFPB published a study in 2015 stating that:
 - 26 million consumers (10% of American adults) are credit invisible
 - 19 million consumers (8% of American adults) are unscored
 - African-American and Hispanic consumers are more likely to be credit invisible or unscored than white or Asian consumers
- Artificial intelligence can serve as tools to make credit available to consumers who might not otherwise be eligible
- They also may allow lenders to better predict credit risk, more effectively target advertising and marketing efforts, and expand their businesses
- However, using AI in extending credit can also present regulatory and other risks

Fair Credit Reporting Act (FCRA)



- Background:
 - Enacted in 1970 to regulate the practices of consumer reporting agencies
 - Purpose:
 - Prevent misuse of sensitive consumer information
 - Improve accuracy of such information
 - Promote efficiency in banking and consumer credit
 - Most significant amendments:
 - Consumer Credit Reporting Reform Act of 1996
 - Fair and Accurate Credit Transaction Practices Act of 2003
 - July 21, 2011: Primary authority to implement and enforce FCRA transferred from the Federal Trade Commission to the Bureau of Consumer Financial Protection



- Key Topics:
 - Permissible Purpose
 - Affiliate Sharing
 - **Disclosures**
 - **Furnisher Requirements**
 - Identity Theft Prevention



- Disclosures

- Disclosure of Credit Scores by Mortgage Lenders

- Creditors that make or arrange mortgage loans using credit scores must provide the score and related information to applicant
 - “Credit score” (or risk predictor or risk score) is a numerical value or categorization derived from a statistical tool or modeling system to predict the likelihood of certain behaviors, such as default
 - Excludes AUS scores that consider information other than credit (e.g., LTV) and any other underwriting factor



- Disclosure of Credit Scores by Mortgage Lenders, cont.
 - Disclosure must include the score the lender used to underwrite the loan and the key factors used to calculate the score
 - “Key factors” are all relevant elements or reasons that adversely affect the score for the particular applicant, listed in order or importance
 - Maximum of four factors, five if one is number of inquiries



– Adverse Action Notices

- Consumer report users (e.g., creditors) must provide an adverse action notice to a consumer if they take an adverse action against the consumer based in whole or part on a consumer report
- The notice must include (among other things):
 - the numerical credit score used by the person;
 - the range of possible credit scores under the model used;
 - all of the key factors that adversely affected the credit score (not to exceed four, five if one of the factors is number of inquiries);
 - the date on which the credit score was created; and
 - the name of the entity that provided the credit score or credit file upon which the credit score was created



– Adverse Action Notices, cont.

- Consumer report users (e.g., creditors) must provide a disclosure to a consumer if they deny credit or increase the charge for credit based on information obtained from a person other than a CRA that bears on the consumer's creditworthiness, credit standing, credit capacity, character, general reputation, personal characteristics, or mode of living
- The disclosure must inform the consumer of his right to request the reasons for the adverse action
- If the consumer requests the reasons, the creditor must provide the nature of the information



– Adverse Action Notices, cont.

- ECOA / Regulation B also require creditors to provide applicants with adverse action notices, including a statement of specific reasons for the action taken (or a notice of the right to receive the reasons)
- Regulation B Commentary:
 - Creditor must disclose the “principal reasons” for the adverse action
 - No specific number of reasons, but “more than four is not likely to be helpful”
 - Reasons must accurately describe the factors actually considered or scored
 - Creditor does not need to describe how or why a factor adversely affected the applicant
 - Regulation does not dictate the method for selecting reasons for adverse action based on a credit scoring system



– Risk-Based Pricing Notice

- Creditors must provide a risk-based pricing notice to a consumer when the creditor, based on a consumer report, extends credit to the consumer on “materially less favorable” terms than the terms the most favorable terms the creditor makes available to a substantial proportion of consumers
- The risk-based pricing notice must include (among other things):
 - the identity of each CRA that furnished a consumer report used in the credit decision;
 - if the consumer’s credit score is used in setting material credit terms:
 - general information about credit scores;



- if the consumer’s credit score is used in setting material credit terms, cont.:
 - the credit score used to make the credit decision;
 - the range of possible credit scores under the model used to generate the credit score;
 - all of the key factors that adversely affected the credit score (not to exceed four, five if one of the factors is number of inquiries);
 - the date on which the credit score was created; and
 - the name of the CRA or other person that provided the credit score



• Furnisher Requirements

- A “furnisher” is an entity that furnishes information related to consumers to CRAs for inclusion in a consumer report
 - Exclusions to the definition of furnisher include:
 - entities that provide information to a CRA solely to obtain a consumer report;
 - entities action as CRAs;
 - the consumer to whom the furnished information pertains;
 - certain acquaintances of the consumer



- Duty to Provide Accurate Information
- Reasonable Policies and Procedures Regarding Accuracy and Integrity of Furnished Information
- Notice to CRAs Regarding Consumer’s Voluntary Account Closure
- Notice to CRAs Regarding Delinquent Accounts
- Duties Upon Notice of Dispute from a CRA
- Duties Upon Notice of Dispute from a Consumer
- Duty to Prevent Re-Polluting Consumer Report
- Negative Information Notice

Model Validation: “Trust but Verify” – Russian Proverb



- Internal trust
- Regulatory trust
 - Regulators increasing concerned with unexpected consequences, and trend will continue
 - FRB and OCC supervisory letter SR 11-7 (April 2011)
 - Model validation core concepts: evaluation of conceptual soundness; ongoing monitoring; outcome analysis
 - Some say outdated, predates significant expansion of AI use
 - Some say flexible, principles based, can be adopted to AI
 - Regulators do not appear to be likely to update it soon
 - Same rigor needed for vendor models, but they may not share proprietary information

Model Validation: Why Does AI Pose Model Validation Challenges?

- Input / Data

- Larger data sets, less structured data sets (e.g., social media)
- More features/attributes, constantly updating data sets

- Processing

- New, unfamiliar algorithms and methods; Relevant variables identified by the algorithm
- “Black box”

- Output

- Correlations, not causation
- Constantly changing

Model Validation: Solutions (for the non-data scientist)



- Wade in slowly
 - AI to aid traditional models
 - AI in parallel to traditional models / challenger models
- Internal sandbox mentality
- Staff up
- Clear set of standards
 - Document testing and approval standards
- High level data science thoughts
 - Ongoing monitoring vs. periodic validation
 - XAI

Fair Lending



- ECOA prohibits discrimination in any aspect of a credit transaction on the basis of race/color, religion, national origin, sex, marital status, age, receipt of public assistance, and exercise of any right under the Consumer Credit Protection Act (e.g., FCRA, TILA, ECOA, FDCPA)
- Broad definition of creditor
 - Any person who, in the ordinary course of business, regularly participates in the credit decision, including setting the terms of the credit
- Also note:
 - Fair Housing Act: prohibits discrimination in residential real estate-related transactions on the basis of race/color, religion, national origin, sex, familial status, and disability

Fair Lending



– State antidiscrimination laws

- Example: California's Unruh Civil Rights Act: prohibits discrimination on the basis of sex, race, color, religion, ancestry, age, disability, medical status, sexual orientation, genetic information, medical condition, citizenship, primary language and immigration status

Fair Lending



- Theories of Liability:
 - Overt Discrimination
 - Explicit refusal to lend or explicit variation in terms or conditions based on a prohibited factor
 - Disparate Treatment
 - Different treatment because of a prohibited factor
 - Application of discretion is most common risk factor (but note that disparate impact theory also has been used to challenge discretionary conduct)
 - Intent not required
 - If defendant cannot show non-pretextual reason for difference in treatment, intent will be inferred

Fair Lending



- Disparate Impact
 - A neutral policy or practice has a disproportionate and negative effect on a protected class
 - May be defensible if the challenged policy or practice serves a legitimate business interest
 - Challenged policy or practice may still be impermissible if the articulated business interest can be served through a less discriminatory means
- *Texas Department of Housing & Consumer Affairs v. Inclusive Communities* (135 S. Ct. 2507 (2015))
 - Disparate impact theory can be used to establish liability under the Fair Housing Act
 - But limitations on the disparate impact theory apply at the pleadings stage:
 - a plaintiff must satisfy a “robust causality” requirement by identifying a specific policy of the defendant and its link to a statistical disparity
 - policies are not contrary to the disparate impact requirement unless they are artificial, arbitrary and unnecessary barriers

Fair Lending



- HUD's 2013 disparate impact rule is arguably inconsistent with *Inclusive Communities*
 - HUD issued RFI and is considering amendments to the rule
- Does *Inclusive Communities* decision apply to ECOA and non-mortgage credit?
 - BCFP announced that it is considering this issue
- Technical application of judicial precedent vs. regulators' interpretation

Fair Lending



- Use of AI can enable institutions to make credit available to previously underserved groups
 - If AI is used to extend credit to those who otherwise would not have received credit (e.g., credit invisibles), it will be less likely to draw scrutiny than if it is used as a primary decision factor
- But AI may inadvertently disfavor certain groups
 - Data quality, choice of training data, model design, training techniques (e.g., feature selection) can lead to inaccurate predictions, which can lead to “erroneous” denials for certain groups

Fair Lending



- Correlation vs. causation
 - Even if predictive power can be established, use of certain factors may be viewed unfavorably, especially when the factors are not intuitively connected to repayment capacity / behavior
- Decisions based on shared characteristics raise fairness concerns
 - Poor credit history of customers who shopped at same places
 - Use of credit for marriage counseling, therapy or tire repair
- Innovators and academics are ahead of government
 - CFPB Upstart No Action Letter is isolated example
 - Explaining machine learning techniques such as neural networks is difficult
 - Explainability (to consumers) is important to regulators, advocates, et al.

Fair Lending



- Top 8 reasons to make fair lending a priority
 - Bureau has expressed focus on disparate impact enforcement
 - Democrats will pressure the BCFP do more
 - Numerous other federal agencies have fair lending enforcement authority
 - State authorities are stepping up
 - Democrats will use the bully pulpit
 - Consumer groups remain active
 - No company is an island
 - It's a long game

AI for Diligence



“This ability to effectively price the risk of loans will most likely draw more investors to mortgage-backed securities and ease the standards that drove the multiple lawsuits when the market dissolved.” [MBA Insights](#).

- Vendors AI offerings

- Credit underwriting/loan portfolio due diligence
- Securitization reviews
- Other vendors will customize AI as requested

- Functionality

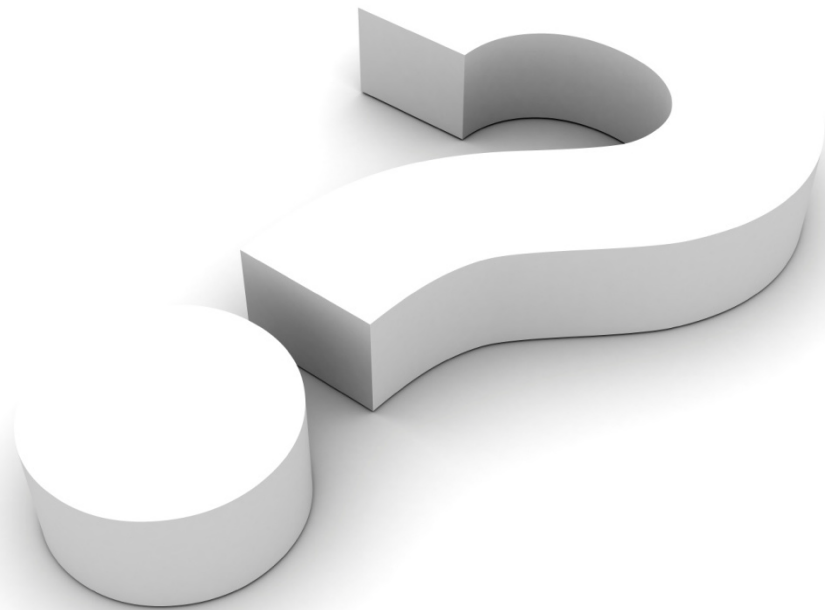
- Organizing and analyzing underlying documents, e.g., identifying key terms, identifying anomalies, ensuring files are complete
- Re-underwriting, comparing against benchmarks, comparing against stated rules and risk tolerances

Questions to Consider



1. Are we safe from humans?
2. Are we comfortable with the features/attributes being considered?
3. Can we explain our process in plain English?
4. What demographics are being served?
5. Have we considered the views of all stakeholders?

QUESTIONS?



MAYER • BROWN



Mayer Brown is a global legal services provider comprising legal practices that are separate entities (the "Mayer Brown Practices"). The Mayer Brown Practices are: Mayer Brown LLP and Mayer Brown Europe-Brussels LLP, both limited liability partnerships established in Illinois USA; Mayer Brown International LLP, a limited liability partnership incorporated in England and Wales (authorized and regulated by the Solicitors Regulation Authority and registered in England and Wales number OC 303359); Mayer Brown, a SELAS established in France; Mayer Brown Mexico, S.C., a sociedad civil formed under the laws of the State of Durango, Mexico; Mayer Brown JSM, a Hong Kong partnership and its associated legal practices in Asia; and Tauli & Chequer Advogados, a Brazilian law partnership with which Mayer Brown is associated. Mayer Brown Consulting (Singapore) Pte. Ltd and its subsidiary, which are affiliated with Mayer Brown, provide customs and trade advisory and consultancy services, not legal services. "Mayer Brown" and the Mayer Brown logo are the trademarks of the Mayer Brown Practices in their respective jurisdictions.