



SolasAI Fair Lending Compliance Checklist

Our experts regularly receive questions about how existing legal and regulatory frameworks for fair lending apply to decisions made by algorithms – including machine learning and artificial intelligence models.

This checklist will help you and your organization to start thinking about how those frameworks apply to your models. This is a complicated and evolving intersection of law and technology. If you have unanswered questions after working through this checklist, [SolasAI](#) can help.¹

Are you using quantitative models or methods to make decisions in lending?

If your organization is at the cutting edge of technology, you are probably already using machine learning (ML) and artificial intelligence (AI) to make lending decisions. Even though these technologies are still in the early days of implementation, algorithmic decision making is already improving efficiency and creating opportunities for growth.

Are you aware of what other lenders are doing to test and mitigate disparate impact concerns when using models – particularly ML and AI models?

In compliance, one of the most dangerous places to be operating is outside of established norms. While there is significant debate over legal requirements for fair lending model testing, we know that most major lenders follow substantially similar practices. Not understanding and adopting what represents best practices in fair lending compliance puts organizations at an unnecessary level of risk, such as in the case of a regulatory examination. Failure to reach these standards may result in legal, financial, and reputational harm.

Does this matter if fair lending regulations do not apply to me?

Short Answer: Yes!

- Scrutiny by regulatory agencies, the Courts and the public of quantitative models (especially machine learning and artificial intelligence) is growing significantly for all industries.
- Algorithmic decisioning's long history of use and scrutiny in consumer finance provides a great blueprint to improve your risk mitigation and governance.
- This checklist provides any company an excellent starting point to prepare for increased regulation and scrutiny of their use of algorithmic models.
- Contact us if you would like to explore how these issues may affect your business.

¹ SolasAI does not provide legal guidance, and this should not be taken as such. This checklist is based on our experts' decades of experience working at the intersection of regulatory compliance and statistical modeling.



Have you considered that regulators may apply these same fair lending standards to ML and AI models?

ML and AI are relatively new technologies, but many – possibly all – of the same fair lending standards developed decades ago apply. ML and AI tools may generate impressive results, but their opaqueness and flexibility can generate challenges for traditional fair lending practices. In fact, the number of [AI incidents](#) per year is growing exponentially.

WHAT TYPES OF THINGS SHOULD BE EXAMINED IN YOUR ORGANIZATION'S AI AND ML MODELS?

Does the model cause a disparate impact on a protected class?

Have you conducted disparity testing that is appropriate for the usage of your models and considers the entire decision pipeline?

Is there a business reason for the model?

If the model has a disparate impact, which many models do, you need to show that the model meets a business need – otherwise the use of the model may be considered discriminatory and illegal. Can your organization explain how the model meets a business need?

Have you tested for Less Discriminatory Alternative (“LDA”) models?

Even if the model meets a business need, you may be required to determine whether a model with less disparate impact that still meets your business needs is available. If such a LDA model exists, your use of the original model may be considered discriminatory and illegal. Have you explored and documented whether there are less discriminatory models available that still meet your organization's needs?

Has the model found a proxy for a protected class it should not be considering at all?

This would represent a serious concern regarding fair lending standards and may be considered discrimination and be illegal. Have you checked to see if it is happening?

Are you exposing your organization to legal, financial, regulatory, and reputational risk?

If you cannot confidently and clearly answer the previous four questions, your organization is likely exposed to various forms of liability. Even though AI and ML are relatively new, these same legal standards will apply. Lawyers, courts, and [regulators](#) are looking for opportunities to apply the existing legal framework to machine learning models.

Are you using any third-party algorithms?

The use of third-party algorithms – including those that use “alternative data” – are gaining popularity. However, the use of these algorithms may add risk to your model. It may be difficult to determine what information the algorithm had access to, and attestations may not be sufficient to protect your organization. Have you tested how third-party algorithms are affecting your model?

Have you thought carefully about how your organization is defining terms such as disparate impact, disparate treatment, bias, proxies, and unfairness?

It is easy to get lulled into a belief that the definition of terms like these are “obvious.” In fact, your models may be built on assumptions about how some of these terms are defined. However, there is a robust body of [research](#) exploring competing – and even conflicting – definitions of these terms. Some of these definitions may even contradict definitions used by courts and regulators. Have you explored how you are defining these terms and how those definitions are shaping your models?

Have you considered risks outside the legal and regulatory environment?

Researchers, journalists, activist groups, and regulators are becoming increasingly aware of the issue of algorithmic bias and raising public awareness. Is your organization able to demonstrate that it has taken concrete steps to measure and reduce algorithmic bias, or will you only be able to point to an unexplainable “black box?”

Is your organization missing out on business opportunities?

A significant disparate impact may mean that your organization is missing out on opportunities. It means there are eligible customers that your organization’s model is declining. Finding a less discriminatory model that still meets your business needs may create more business opportunity.

HOW CAN SOLASAI HELP?

SolasAI was created by experts who have helped companies – including over half of the Fortune 50 companies – to reduce legal and reputational exposure to claims of discrimination. That expertise concerning the use of models is now available in a software package: SolasAI. SolasAI will take your existing models and help you develop new models with less disparate impact while continuing to meet your business needs.

WHY IS SOLASAI DIFFERENT?

We are not AutoML. We do not reinvent or replace your modeling process. We use your existing models and production pipeline and apply our data science and regulatory expertise to find models within your existing framework that are less discriminatory.

For more information, please visit us at: www.solas.ai

Or email us directly at: info@solas.ai

