DRAFT Recommendations of the FACI Availability Subcommittee to FACI

For Discussion and Possible Action during Subcommittee Call on May 27, 2020

Proposed Recommendations

FACI recommends that FIO support disparate impact as unfair discrimination against protected classes in residential property insurance under the Fair Housing Act as currently recognized by the Department of Housing and Urban Development (HUD) and oppose the proposed revisions to HUD's disparate impact rules.

FACI recommends that FIO encourage states to modernize insurance regulation by explicit recognition of disparate impact as unfair discrimination against protected classes and further encourage states to develop statutory or regulatory guidance for insurers to identify and minimize disparate impact against protected classes and for safe harbors for insurers to demonstrate compliance.

Discussion

What is Disparate Impact Unfair Discrimination?

Disparate impact refers to policies, practices and outcomes that have the effect of discriminating against protected classes. Disparate impact refers to a different type of unfair discrimination from disparate treatment. Disparate treatment means discriminating directly on the basis of prohibited characteristics, while disparate impact, also known as disparate effect, refers to discrimination based on practices that have the effect of discriminating on the basis of prohibited characteristics.

While a controversial issue in financial services regulation, disparate impact has been recognized as a form of prohibited unfair discrimination by numerous courts, including the U.S. Supreme Court in a 2015 decision. Justice Kennedy wrote

> Recognition of disparate-impact claims is also consistent with the central purpose of the FHA, which, like Title VII and the ADEA, was enacted to eradicate discriminatory practices within a sector of the Nation's economy. Suits targeting unlawful zoning laws and other housing restrictions that unfairly exclude minorities from certain neighborhoods without sufficient justification are at the heartland of disparate-impact liability. See, *e.g.*, *Huntington* v. *Huntington Branch, NAACP*, 488 U. S. 15, 16–18. Recognition of disparate-impact liability under the FHA plays an important role in uncovering discriminatory intent: it permits plaintiffs to counteract unconscious prejudices and disguised animus that escape easy classification as disparate treatment.

> The Court holds that disparate-impact claims are cognizable under the Fair Housing Act upon considering its results-oriented language, the Court's interpretation of similar language in Title VII and the ADEA, Congress' ratification of disparate-impact claims in 1988 against the backdrop of the unanimous view of nine Courts of Appeals, and the statutory purpose.

The Supreme Court case dealt with a disparate impact claim under the federal Fair Housing Act which prohibits discrimination in housing on the basis on the basis of race, color, religion, sex, familial status, or national origin. In addition to recognizing disparate impact as a type of unfair discrimination covered by the FHA, courts have also recognized that unfair discrimination in home insurance – whether disparate treatment or disparate impact – is also covered by the FHA.

Why is Explicit Recognition of Disparate Impact as Unfair Discrimination in Insurance against Protected Classes Reasonable and Necessary?

1. ***If discriminating intentionally on the basis of prohibited classes is prohibited – e.g., insurers are prohibited from using race, religion or national origin as underwriting, tier placement or rating factors – why would practices that have the same effect be permitted?***

Example of Disparate Impact in insurance: In the 1990's, fair housing groups brought a disparate impact challenge against insurers' use of age and value of the home for underwriting. The groups argued that these underwriting guidelines discriminated against minority communities because these communities' housing was characterized by low value and old age. The challenges were largely successful and, in response, insurers developed more detailed underwriting based on, for example, age and type of electrical system and age and condition of the roof.

2. ***In an era of big data analytics, the potential for proxy discrimination has grown dramatically.***

> Barocas and Selbst: *Big Data's Disparate Impact*
>
> Advocates of algorithmic techniques like data mining argue that they eliminate human biases from the decision-making process. But an algorithm is only as good as the data it works with. Data mining can inherit the prejudices of prior decision-makers or reflect the widespread biases that persist in society at large. Often, the "patterns" it discovers are simply preexisting societal patterns of inequality and exclusion. Unthinking reliance on data mining can deny members of vulnerable groups full participation in society.
>
> TransUnion Criminal History Scores
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> **"TransUnion recently evaluated the predictive power of court record violation data (including criminal and traffic violations)**
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> "Also, as court records are created when the initial citation is issued, they provide insight into violations beyond those that ultimately end up on the MVR—such as violation dismissals, violation downgrades, and pre-adjudicated or open tickets."

What is the likelihood that TU Criminal History Scores have a disparate impact against African-Americans? Consider policing records in Ferguson, Missouri.

> US DOJ Investigation of the Ferguson Police Department
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> Ferguson's approach to law enforcement both reflects and reinforces racial bias, including stereotyping. The harms of Ferguson's police and court practices are borne disproportionately by African Americans, and there is evidence that this is due in part to intentional discrimination on the basis of race.
>
> Ferguson's law enforcement practices overwhelmingly impact African Americans. Data collected by the Ferguson Police Department from 2012 to 2014 shows that African Americans account for 85% of vehicle stops, 90% of citations, and 93% of arrests made by FPD officers, despite comprising only 67% of Ferguson's population.
>
> FPD appears to bring certain offenses almost exclusively against African Americans. For example, from 2011 to 2013, African Americans accounted for 95% of Manner of Walking in Roadway charges, and 94% of all Failure to Comply charges.
>
> Our investigation indicates that this disproportionate burden on African Americans cannot be explained by any difference in the rate at which people of different races violate the law. Rather, our investigation has revealed that these disparities occur, at least in part, because of unlawful bias against and stereotypes about African Americans.

3. *Disparate Impact is Particularly Suited to Insurance: Disparate Impact Analysis is Consistent with State Regulatory Requirements Regarding Unfair Discrimination and with Actuarial Justification Used by Insurers.*

State insurance laws and regulation typically require prohibit rates and other practices that are unfairly discriminatory. For pricing (underwriting, tier placement, rating factors), unfair discrimination is generally understood as a statistical or actuarial measure – consumers of similar risk and hazard are treated differently.

Actuarial justification is a statistical test – that a particular characteristic of the consumer, vehicle, property or environment is correlated with a particular outcome, like pure premium (average claim cost). The same statistical test can be used to evaluate and minimize disparate impact. Stated differently – if a particular correlation and statistical significance is used to justify, say, insurance credit scoring, those same standards of correlation and statistical significance are reasonable evidence of disparate impact and unfair discrimination on the basis of prohibited factors.

In addition, the ability of insurers to identify and minimize disparate impact can be easily built into the development of pricing, marketing or claim settlement models by including consideration of prohibited characteristics as control variables in the development of the model and then omitting these prohibited characteristics when the model is deployed.

Consider the simple model

$$b_0 + b_1X_1 + b_2X_2 + b_3X_3 + e = y$$

Say that $X_1, X_2 + X_3$ are miles driven, driving record and credit score and we are trying to predict y – the frequency of an auto claim.

Let's assume that all three Xs are statistically significant predictors of the likelihood of a claim and the b values are how much each X contributes to the explanation of claim.

b_0 is the "intercept" – a base amount and e is the error term – the portion of the explanation of the claim not provided by the independent variables.

Now, let's add a control variable for race:

$$b_0 + b_1X_1 + b_2X_2 + b_3X_3 + \mathbf{b_4R_1} + e = y$$

R_1 is a control variable – by including race in the model development, the correlation of the Xs to race is statistically removed and the new b values are now the contribution of the Xs, independent of their correlation to race, to explaining the likelihood of a claim

When the model is deployed, the variable for race is removed – the Xs remain, but the b values now minimize disparate impact.

Recognizing disparate impact as unfair discrimination in insurance is both reasonable and beneficial:

- Minimizes Disparate Impact – Stop the Cycle of Perpetuating Historical Discrimination.
- Promotes Availability and Affordability for Underserved Groups
- Improves Cost-Based Insurance Pricing Models
- Improve Price Signals to Insureds for Loss Mitigation Investments
- Help Identify Biases in Data and Modelers / Improve Data Insights
- Improve Consumer Confidence of Fair Treatment by Insurers

How Does the Current HUD Rule Address Disparate Impact Unfair Discrimination? Why Does the Proposed HUD Rule Effectively Eliminate Disparate Impact?

In 2013 HUD finalized a revised rule codifying its enforcement practices regarding disparate impact (‘disparate effects”).[1] The rule codified the three-part burden shifting test:

> This rule formally establishes the three-part burden-shifting test for determining when a practice with a discriminatory effect violates the Fair Housing Act. Under this test, the charging party or plaintiff first bears the burden of proving its prima facie case that a practice results in, or would predictably result in, a discriminatory effect on the basis of a protected characteristic. If the charging party or plaintiff proves a prima facie case, the burden of proof shifts to the respondent or defendant to prove that the challenged practice is necessary to achieve one or more of its substantial, legitimate, nondiscriminatory interests. If the respondent or defendant satisfies this burden, then the charging party or plaintiff may still establish liability by proving that the substantial, legitimate, nondiscriminatory interest could be served by a practice that has a less discriminatory effect.

Disparate impact insurance claims under the FHA have been rate. When brought, typically by a fair housing organization, the charging party must provide a substantive basis for the allegation and such basis has typically included statistical tests. If the charging party meets its burden of demonstrating possible disparate impact unfair discrimination, the defendant insurer has the opportunity to, one, demonstrate that the statistical evidence support the disparate impact claim is flawed, and, two, that the challenged practice serves a substantial, legitimate and nondiscriminatory purpose. Finally, the burden then shifts to the charging party to demonstrate that the legitimate purpose can be accomplished in a manner with a lesser disparate impact on the protected class or classes.

In 2019, HUD proposed revisions to the disparate impact rule that would effectively eliminate disparate impact as unfair discrimination by adding a variety of new requirements and defenses, including, but not limited to the following::

- <u>Identify a specific, identifiable practice as opposed to simply identifying the disparate impact.</u> This provision would eliminate a disparate impact claim that demonstrated disparate impact, but failed to pinpoint the specific industry practice causing it. Given that insurers have come to rely more and more on third party data and algorithms that are treated as confidential, the ability of a charging party to pinpoint the specific cause of the disparate impact is unlikely and unreasonable.

[1] https://www.hud.gov/sites/documents/DISCRIMINATORYEFFECTRULE.PDF

As discussed further, below, the nature of insurer underwriting, pricing and claims settlement practices has changed dramatically over the past few decades. Thirty years ago, the vast majority of risk characteristics and factors used for pricing were included in regulatory filings and transparent to regulators and consumers. But in recent years, the use of proprietary third-party data sources and algorithms and the introduction of "rating tiers" as unfiled underwriting guidelines have made insurer practices far less transparent to regulators and even less transparent to consumers.

- <u>Change the order of burdens to require the charging party to initially plead that a practice is arbitrary, artificial and unnecessary.</u> In the current rule, this burden on the charging party comes only after the insurer has explained why the practice is legitimate and necessary. The proposed change asks the charging party for the impossible – to rebut a business necessity claim without having access to the business necessity explanation.

- <u>Require new standards of evidence – a "robust causal link" and "injury is directly caused by the challenged policy or practice."</u> These standards effectively preclude any disparate impact challenge because they require the charging party not just to identify disparate impact but also pinpoint the precise practice that is causing the disparate impact. Consider the following example. A fair housing organization, the charging party could, performs statistically-valid testing and produces statistical-valid evidence of disparate impact upon, say, African-Americans in the offer of rental insurance. Under the current rule, the charging party would have met its prima facie burden. Under the proposed rule, the charging party would not meet the various new burdens because the charging party has not pin-pointed the specific underwriting guideline or algorithm used by the insurer causing the disparate impact.

- <u>Justify disparate impact simply by reliance on a third-party model or algorithm.</u> The proposed rule allows the defendant to defeat the disparate impact claim – even if the charging party has somehow met the new requirements to establish a prima facie case of discriminatory effect simply by relying upon a third party model:

  Failure to allege a prima facie case. A defendant, or responding party, may establish that a plaintiff's allegations do not support a prima facie case of discriminatory effect under paragraph (b), if

  (2) Where a plaintiff alleges that the cause of a discriminatory effect is a model used by the defendant, such as a risk assessment algorithm, and the defendant:

  (i) Provides the material factors which make up the inputs used in the challenged model and shows that these factors do not rely in any material part on factors which are substitutes or close proxies for protected classes under the Fair Housing Act and that the model is predictive of credit risk or other similar valid objective;

(ii) Shows that the challenged model is produced, maintained, or distributed by a recognized third party that determines industry standards, the inputs and methods within the model are not determined by the defendant, and the defendant is using the model as intended by the third party; or

(iii) Shows that the model has been subjected to critical review and has been validated by an objective and unbiased neutral third party which has analyzed the challenged model and found that the model was empirically derived and is a demonstrably and statistically sound algorithm which accurately predicts risk or other valid objectives, and that none of the factors used in the algorithm rely in any material part on factors which are substitutes or close proxies for protected classes under the Fair Housing Act;

The third-party model or algorithm defense is flawed for several reasons. Most important, it eliminates disparate impact as unfair discrimination. Subpart (i) says that a practice based on a third-party model or algorithm is fair – and cannot have a disparate impact – as long as the prohibited factors are not used in the model. This is contrary to the very definition and spirit of disparate impact – that superficially-neutral factors or practices can lead to disparate effects. Under subpart (i), the TransUnion criminal history score, discussed above, would pass muster, even though this algorithm clearly reflects and perpetuates the discrimination that anti-discrimination laws are intended to stop.

Subpart (ii) removes any responsibility by the insurer for the outcomes of its practices as long as those practices are based on a third-party model. This is contrary to insurance regulatory practice which makes insurers responsible for third-party tools the insurer may use. Even in situations where the regulator permits the insurer to rely on third party certification of a model that is done subject to regulatory review of the model through filings by vendors or advisory organizations.

Subpart (iii) removes any requirement that a third-party modeler test its model for disparate impact. The result is that an insurer can rely upon a third-party model even if that that modeler has done nothing to examine or minimize disparate impact in its model. All three subparts of this defense provision reflect a profound and fundamental misunderstanding of both disparate impact and the nature of complex, multi-variate models used by insurers (and others) today.

APCIA Arguments against Recognition of Disparate Impact Based on Faulty Assumptions

APCIA made a lengthy presentation and submitted extensive comments to the subcommittee on the disparate impact issue. APCIA opposes recognition of disparate impact as unfair discrimination in insurance. APCIA'a arguments can be distilled to the following:

State laws require rates to be not excessive, not inadequate and not unfairly discriminatory. These standards require cost-based pricing. Recognition of disparate impact would prevent insurers from utilizing neutral factors that are predictive of risk and loss and, thus, undermine the business of insurance and conflict with existing state laws.

There are several problems with APCIA's argument.

State Insurance Regulators Believe They Currently Have Authority to Stop Disparate Impact Unfair Discrimination – But Regulatory Standards for Regulators and Insurers Are Lacking

Most state regulators believe they currently have authority to stop insurer practices which have the effect of discriminating against protected classes even if the prohibited class characteristics are not explicitly being used. Examples demonstrating such regulatory belief include:

- The New York Department of Financial Services Circular Letter 2019-01: Use of External Consumer Data and Information Sources in Underwriting for Life Insurance.[2] "*Based on its investigation, the Department has determined that insurers' use of external data sources in underwriting has the strong potential to mask the forms of discrimination prohibited by these laws. Many of these external data sources use geographical data (including community-level mortality, addiction or smoking data), homeownership data, credit information, educational attainment, licensures, civil judgments and court records, which all have the potential to reflect disguised and illegal race-based underwriting that violates Articles 26 and 42. . . . an insurer should not use an external data source, algorithm or predictive model in underwriting or rating unless the insurer can establish that the underwriting or rating guidelines are not unfairly discriminatory in violation of Articles 26 and 42.*"

- The *NAIC Market Regulation Handbook* in the chapter discussing global objectives of market analysis states:
  I*dentify underwriting and rating variables that may have a significant disparate impact or are proxy variables for prohibited characteristics***:** *Some variables may serve to disproportionately deny coverage to specific geographic markets and may also lack strong actuarial justification.*[3]

Although state insurance regulators believe they have the authority to stop proxy discrimination, there are currently no regulatory standards for what constitutes such discrimination, what types of analysis and tools can serve as appropriate evidence or what practices insurers or third-party vendors of algorithms can employ to demonstrate efforts to minimize disparate impact.

[2] https://www.dfs.ny.gov/industry_guidance/circular_letters/cl2019_01
[3] *NAIV Market Regulation Handbook, 2017 Edition* at page 67.

APCIC Incorrectly Argues That Efforts to Minimize Disparate Impact Will Necessarily and Substantially Impair Cost-Based Pricing

APCIA's foundational argument – that recognition of disparate impact must impair cost-based pricing and, therefore, undermine the business of insurance and violate state laws – is incorrect. APCIA's claim is based on a concept that recognition of disparate impact would prevent insurers (in pricing) from using factors that have a correlation to expected losses. This reflects a fundamental misunderstanding how to recognize disparate impact, how to minimize disparate impact and how insurer pricing has changed over the past 30 years.

Historically, insurers did not utilize multi-variate analyses to a great extent. That means, historically, insurers would look at the relationship between a particular rating factor and expected losses and do the same for the next rating factor – described as a univariate approach because analysis was based one factor at a time. For some large insurers or advisory organizations who had large enough data sets to meet credibility standards, we might have seen two factors analyzed.

Over the last three decades, univariate analysis has been replaced by multi-variate analysis – the analysis of multiple factors simultaneously to evaluate each factor's contribution to claims (or other value to be predicted.) Today, this analysis is done through a variety of statistical techniques, including generalized linear models. Multi-variate analysis has significant benefits over traditional univariate analysis in at least two major ways.

First, multi-variate analysis helps to remove the effects of correlation among the rating factors. Stated differently, if say, geographic rating and multi-car discounts were analyzed separately, there might be some double-counting because multi-car discounts might be much more prevalent in certain geographic rating territories. Multi-variate analysis, by analyzing the various factors simultaneously, helps remove such double counting and permits the identification of each factor's unique contribution to explaining risk of loss (or other predicted outcome).

Second, multi-variate analysis permits the use of "control variables" to reduce the effect of other influences on the rating factors. For example, many auto and home insurers today utilize a GLM or similar model to create a nationwide rating model. In building these models, the insurers will typically use a control variable to account for different state's effects – for example, for auto insurance, different tort systems and different minimum insurance requirements. By including a control variable for state – the statistical model removes some of the state effects from other variables, leaving the results of those other variables a better and more accurate indication of those variables independent relationship with the predicted outcome.

Recognizing disparate impact as unfair discrimination in insurance will improve – and not impair – cost-based pricing or other insurance applications. For example, by explicit recognition of the variables for protected classes as control variables in the insurer's model development, the insurer can better identify the unique contribution of other rating or predictive variables to the predicted outcome because the correlation between those variables and protected class characteristics has been minimized by using the protected class characteristics as control variables.

APCIA's Incorrectly Argues That Any Practice That Does Not Explicitly Utilize or is Based Upon Protected Class Characteristics is Neutral and Cannot Have a Disparate Impact.

Running throughout APCIA's arguments is the concept that any factor other than those explicit descriptors of prohibited classes are neutral. As noted above, it is universally understood that factors other than protected-class descriptors can be correlated with and/or serve as a proxy for the prohibited class descriptors. This is the case because so-called "facially neutral" factors can reflect historical discrimination or serve as a proxy for the prohibited class characteristics. It makes no more sense to claim that factor X cannot have a discriminatory effect on a protected class because it is not an explicit descriptor of the protected class than to claim that factor X cannot have be predictive of claims because it is not an explicit descriptor of claims.

APCIA's claim is particularly wrong in the current era of multivariate models used by insurers. It has long been a staple of actuarial standards of practice that justification for any particular rating factor requires only a demonstration of correlation or significant statistical relationship. In an era of multi-variate models, the method of demonstration is to examine statistical measures of the model, including, for example, the coefficient of predictive variable / rating factor (is it large enough to be meaningful?) and the statistical significance of the variable (is there a strong statistical relationship between the variable and the predicted outcome?). Stated differently, the method to justify that a particular rating factor is not unfairly discriminatory and meets both statutory and actuarial standards is to demonstrate a significant statistical relationship or correlation. It is both logical and reasonable that the same type of test of statistical significant or justification be available for assessing unfair discrimination.