

Federal Advisory Committee on Insurance
Subcommittee on Availability of Insurance Products
Background for Discussion on November 8, 2019 Conference Call

Subcommittee Topics/Issues

During the subcommittee's August 2019, the group identified three issues for future discussion and potential recommendations to FOCI:¹

1. Long-Term Care Insurance
2. Disparate Impact
3. Insurance-Specific Principles for Artificial Intelligence and Digital Rights/Data Privacy

As discussed below, the co-chairs of the subcommittee on availability have decided to discuss issues 2 and 3 on the November 8, 2019 call.

Long Term Care Insurance

A number of state and federal activities related to long-term care insurance are on-going. The NAIC has established an Executive Committee Task Force to address a number of regulatory and consumer protection issues related to LTCI.² That work is ongoing, but no proposals or details of the Task Force's work have been published. In addition, there is a federal interagency task force convened by the Treasury Department to examine issues and problems with the LTCI market. The Task Force is expected to produce a report this year, but it has not yet been published.

Given the major pending activities of the NAIC and the federal interagency task force on LTCI, the subcommittee on availability will wait to further discuss LTCI until work products of the NAIC and the interagency Task Force are available.

Disparate Impact

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.

¹ The draft minutes of the August 019 call are attached.

² A recent update on the NAIC LTC TF is attached.

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.

Financial institutions have long sought to eliminate disparate impact as a form of unfair discrimination. Insurers have argued that disparate impact is particularly unsuited to insurance, that recognizing disparate impact as unfair discrimination would undermine risk-based pricing and the state regulatory system and would lead to massive amounts of litigation.

For purposes of subcommittee discussion, the following are some arguments for the state-based insurance regulatory system to recognize disparate impact as unfair discrimination.

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

"TransUnion recently evaluated the predictive power of court record violation data (including criminal and traffic violations)

"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

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 X s 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:

$$b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4R_1 + e = y$$

R_1 is a control variable – by including race in the model development, the correlation of the X s to race is statistically removed and the new b values are now the contribution of the X s, 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 X s 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

For Subcommittee Discussion:

- What are subcommittee members' views of the arguments for recognizing disparate impact as unfair discrimination?
- What are the arguments against recognizing disparate impact as unfair discrimination and who might the subcommittee ask to present those views?
- How might disparate impact affect the current state-based regulatory system regarding unfair discrimination?
- What role should FIO play in the disparate impact debate and what can the subcommittee do to support FIO?

Insurance-Specific Principles for Artificial Intelligence and Digital Rights/Data Privacy

There has been growing recognition by governments and regulatory agencies around the world that big data analytics (BDA) and artificial intelligence (AI) have the potential for great consumer and societal benefits, but AI and BDA practices also raise concern about consumers' digital rights and the fair treatment of consumers. In response, a number of jurisdictions have developed or are in the process of developing principles for ethical AI as well as regulations and laws to ensure consumers' digital rights and data privacy. Regarding principles for AI, the NAIC has created a new AI working group to develop such principles and has requested comments on the principles developed by the Organization for Economic Cooperation and Development (OECD) as a starting point for the NAIC's work.³ The OECD's AI principles are:

³ The AI WG web page and materials are found at https://content.naic.org/cmte_ex_ai_wg.htm

- AI should benefit people and the planet by driving inclusive growth, sustainable development and well-being.
- AI systems should be designed in a way that respects the rule of law, human rights, democratic values and diversity, and they should include appropriate safeguards – for example, enabling human intervention where necessary – to ensure a fair and just society.
- There should be transparency and responsible disclosure around AI systems to ensure that people understand AI-based outcomes and can challenge them.
- AI systems must function in a robust, secure and safe way throughout their life cycles and potential risks should be continually assessed and managed.
- Organisations and individuals developing, deploying or operating AI systems should be held accountable for their proper functioning in line with the above principles.

In addition, there has been considerable activity in the U.S. and internationally regarding digital rights and data privacy, including the European Union General Data Protection Regulation and the California Consumer Privacy Act.

For purposes of discussion by the subcommittee, are there insurance-specific issues with either principles for AI or digital rights / data privacy and should there be insurance-specific considerations? As an example, the Center for Economic Justice has proposed the following:

- **Cost-Based Pricing:** Protect insurer financial condition, provide proper investment risk / mitigation benefit price signals, fair treatment of consumers entering into contracts of adhesion
- **Loss Prevention / Mitigation / Sustainability / Resilience:** Enhance, not undermine the loss prevention potential of insurance
- **Risk Pooling:** Protect risk diversification, availability and affordability of insurance
- **Availability / Affordability –** Address the protection gap for low- and moderate-income consumers and small businesses. Most important tool for individual, business and community recovery and resilience.
- **Fair Competition –** Antitrust enforcement for emerging types of collective pricing and claim settlement practices facilitated by big data algorithms
- **Fair Competition –** Empower consumers by more symmetric sharing of information between insurers and consumers
- **Digital Rights –** consumer ownership and consent to identified uses, protection of consumer data, contestability, disclosure of and remediation following data breaches
- **Transparency, Explainability and Accountability –** ethical and accountable algorithms
- **Regulatory and Legal Compliance –** compliance with the letter of and the intent of the law