NATIONAL COUNCIL OF INSURANCE LEGISLATORS
SPECIAL COMMITTEE ON RACE IN INSURANCE UNDERWRITING
TAMPA, FLORIDA
DECEMBER 9, 2020
DRAFT MINUTES

The National Council of Insurance Legislators (NCOIL) Special Committee on Race in Insurance Underwriting met at the Tampa Marriott Water Street Hotel on Wednesday, December 9, 2020 at 9:30 A.M. (EST). This was the first of two meetings held that day. The second meeting convened at 2:00 P.M. (EST) and is documented in a separate set of minutes.

Senator Neil Breslin of New York, Chair of the Committee, presided*.

Other members of the Committee present were (* indicates virtual attendance via Zoom):

Sen. Jason Rapert (AR)   Asw. Maggie Carlton (NV)*
Asm. Ken Cooley (CA)*   Asm. Kevin Cahill (NY)*
Rep. Matt Lehman (IN)   Asw. Pam Hunter (NY)*
Rep. Edmond Jordan (LA)*   Sen. Bob Hackett (OH)*
Rep. George Keiser (ND)*

Other legislators present were:

Sen. Mike Gaskill (IN)   Sen. Shawn Vedaa (ND)
Rep. Peggy Mayfield (IN)*   Rep. Wendi Thomas (PA)*
Rep. Jim Gooch (KY)*   Rep. Joe Schmick (WA)*

Also in attendance were:

Commissioner Tom Considine, NCOIL CEO
Will Melofchik, NCOIL General Counsel
Tess Badenhausen, Assistant Director of Administration, NCOIL Support Services, LLC

OPENING REMARKS

Rep. Matt Lehman (IN), NCOIL President, thanked everyone for participating and stated that he is extremely proud to serve as President of NCOIL as the organization takes strides to show leadership on these very important issues, and is delighted and thankful that Senator Breslin agreed to serve as Chair of this Committee. Having conversations like these that the Committee will have today is not easy. But NCOIL cannot sit idly while decisions that can have a huge impact on constituents and the state-based system of insurance regulation in general are made without input from state insurance legislators. Indeed, state legislators are those that have been vested with the authority to make such decisions pursuant to the McCarran-Ferguson Act enacted 75 years ago. In that regard, Rep. Lehman thanked all the interested parties that reached out with constructive feedback on the Committee's work and determined that getting involved with the Committee is the best way to proceed. Rep. Lehman also thanked his fellow Officers for agreeing to serve on this Committee, as well as the other legislators that volunteered to do so.

In terms of a timeline for this Committee, in Rep. Lehman's discussions with Senator Breslin, they both agreed that there won't be any votes on anything today and the Committee will have

to meet again to finalize any work product. Whether that will be via one or multiple Zoom meetings following this meeting, or convening again at the March meeting – or both or neither – will need to be determined depending on how the conversations go today. Rep. Lehman closed by stating that Zoom meetings can be difficult but everyone needs to be patient and wait for their turn to speak. Also, if anyone has any plans on trying to interrupt anyone speaking or providing purely opinion testimony that is not rooted in the law or any data, they are warned that such actions will not be entertained. NCOIL will not tolerate attacks on any individuals or organizations, period.

Sen. Neil Breslin (NY), Chair of the Committee, stated that he wishes he could be there but there is currently a big crisis in NY – a multi billion dollar deficit and while NY isn't unique among states with that problem he had to stay in NY. Sen. Breslin stated that NCOIL deserves credit for taking a lead in discussing these topics. They topics are not addressed at particular companies or people but its really a self assessment and self evaluation to take as much input as possible from as many people in the industry, legislators and consumer representatives. Rep. Lehman has done so much for NCOIL over the years and now as President he is continuing that. NCOIL has done a good job in preparing for this meeting today. Several conversations have taken place leading up to this to set up parameters and this meeting is critically important.

With regard to the McCarran-Ferguson Act, NCOIL has a long history supporting that. NCOIL testified in Congress several years ago regarding that Act and there are periodically attacks on the Act. Federal legislation has been introduced that seeks to intrude on the state based system. NCOIL stands firmly in the belief that unfair discrimination in any and every form is wrong and that is especially true for racial discrimination because of the abhorrent history involved. Forming this committee shows commitment to reviewing the insurance regulatory system in order to determine whether current practices exist in the system that disadvantage people of color because of their status while recognizing that changes in the industry system including determinations regarding rating variables must ultimately be made in a state legislative forum. Sen. Breslin stated that everyone should be familiar with the committee charges but he will review them now.

The Committee is charged with: taking testimony, discussing, and defining the term "proxy discrimination" – an undefined term that has been used by many when discussing insurance rating, and has even been included in regulatory-related documents; and discussing the wisdom of certain rating factors being used in insurance underwriting, such as zip code, and level of education. Sen. Breslin stated that he looks forward to the discussions today to hearing from the speakers. The first panel will provide an overview of the statutory insurance ratemaking framework.

OVERVIEW OF INSURANCE RATEMAKING STATUTORY FRAMEWORK

Laura Foggan, Esq., Partner at Crowell & Moring, LLP, stated that she appreciates the opportunity to speak to the committee and outline the statutory framework governing insurance ratemaking as part of the overall hearing. Racial injustice has been thrust into the forefront of our minds and our experiences in 2020 by a series of devastating events and the public policy goals of eliminating racial bias and discrimination are being revisited throughout society including in the insurance system and insurance community. As state insurance legislators you have a key role to paly in addressing race and racial justice in the insurance system and this includes the responsibility being advanced by NCOIL and this Committee to examine insurance underwriting fairness.

Later panels today will focus on the definition of "proxy discrimination" and specific rating factors in underwriting. This panels charge is to provide a grounding for further discussion for an overview of the insurance ratemaking statutory framework and in the testimony that follows I therefore describe the current framework and how applicable standards for ratemaking work under current law. To begin with, the state statutory standards established by state legislatures govern insurance ratemaking. Insurer conduct in ratemaking is also overseen by state regulators based on the authority delegated to them to implement these state insurance laws. This reflects the McCarran-Ferguson Act and the delegation to the states of primary responsibility for regulating insurance in this country. While there is some variations in provisions from state to state at their core state laws governing ratemaking forbid insurers from setting rates that are excessive, inadequate or unfairly discriminatory. Those are the core principles in the current statutory framework. Insurance rates cannot be excessive, inadequate or unfairly discriminatory.

Today, our attention is focused laser like on the statutory requirement that rates cannot be unfairly discriminatory. We should begin with recognition of that the term unfairly discriminatory in insurance ratemaking is a term of art. It is a term with a particular and well defined meaning in the context of insurance ratemaking. As the Third Department of the New York Appellate Division said in a case discussing this term: "unfair discrimination is a word of art used in the field of insurance which in a broad sense means the offering of sales to customers in a given market segment identical or similar products at different probable costs." In insurance ratemaking, unfair discrimination is price discrimination that is setting a higher rate for an insurance purchase or group of purchasers that is not actuarially justified by a difference in the cost of providing insurance.

The fundamental concept of the state statutes governing insurance ratemaking is that the rates that insurers set must rest on cost based pricing. Cost based pricing is also known as risk based pricing. The state statutes governing insurance ratemaking make this clear. For instance, the Louisiana statute explains "unfairly discriminatory does not refer to rates that produce different premiums for policyholders with different loss exposures so long as the rate is actuarially justified and reflects such differences with reasonable accuracy." The Nevada statute provides "one rate is unfairly discriminatory in relation to another in the same class if it clearly fails to reflect equitably the difference in expected losses and expenses." The Minnesota statute says the same as do a great number of statutes and almost all use the terms inadequate excessive and unfairly discriminatory.

Courts agree that unfair discrimination is a term of art in the statutory framework governing insurance ratemaking. The Maryland Court of Appeals, MD's highest court, said that unfair discrimination as the term is employed by the insurance code means discrimination among insureds in the same class based on something other than actuarial risk. The Massachusetts Supreme Court, MA's highest court, made clear that the intended result of the risk classification process is that persons of substantially the same risk will be grouped together paying the same premiums and will not be subsidizing insureds who present a greater hazard. Understanding that unfair discrimination has a particular meaning in the statutory framework governing insurance rates is important. As many commentators have observed, all insurance rating depends on discrimination and differentiation of groups based on actuarial factors. Discrimination in setting insurance rates is expected and necessary. It is unfair under the core legislative framework only if it is statistically, that is actuarially, justified.

Statutes governing underwriting practices set out the principle that unfair discrimination prohibits insurers use of a differentiation that is not actuarially justified. In other words, when a rating factor's predictive value is shown then insurers reliance on that factor is fair under the statutes. As the Massachusetts Supreme Court put it "the basic principle underlying statues governing underwriting practices is that insurers have the right to classify risks and to elect not to insure risks if the discrimination is fair. The intended result of the process is that persons of substantially the same risk will be grouped together." This statutory approach is the framework of cost based or risk based pricing. When actuarial justification for use of a classification is shown, then use of the factor is permitted because there has been a legislative judgment in favor of risk based pricing. The legislative standard reflects a basic belief that price should reflect cost. So, in the insurance context this means that there has been a legislative judgment that tying price to risk is equitable and fair. This legislative judgment makes sense. Not only is there a broad societal norm that you should pay for the costs of what you get but risk based pricing is also consistent with how an efficient market works.

In a competitive marketplace an insurer wants to price its coverage as accurate as possible. It will not use a characteristic with no predictive power in underwriting. Insurers are incentivized to charge different premiums to individuals who pose different predictive risks. This is desirable because charging the same price to individuals with different risks can generate a moral hazard problem where an insured with an undesirable risk profile purchases more insurance and it can encourage adverse selection where a lower risk individual elects not to purchase coverage which has become too expensive – the price is too high because the premium subsidized the riskier actor grouped with the lower risk one. Allowing insurers to set rates and prices in accordance with risk avoids these hazards. That makes the marketplace more efficient and decreases the risk of insurer insolvency.

In short, there is strong public policy supporting the statutory framework of risk based pricing. The existing statutory framework also includes certain protections against injustice in insurance underwriting. For insurance, one fundamental protection against injustice in the risk based system is the requirement of actuarial justification for any factor used to discriminate among insurance purchases. A rate based on any risk classification must predict future costs associated with the risk transfer. There must in other words be a business justification for using the classification. An insurer may not rely on a factor or characteristic due to animus or bigotry. Only a characteristic with predictive power in underwriting is permissible under a risk based pricing system. The rate produced must be an actuarially sound estimate of the expected value of all future costs associated with the risk transfer.

Under current law, there are also some protections against injustice in legislation that specifically prohibits the use of race, religion and national origin as factors in setting rates. Sate legislatures have passed laws forbidding the use of underwriting classifications that are abhorrent to public policy such as discrimination in rates based on race, religion and national origin. Some states have outlawed other rating factors on public policy grounds as well. There are for instance state laws forbidding insurers from setting rates based on sexual orientation, gender or genetic traits. Through public policy determinations made by state legislatures these laws provide an added measure of protection against rating factors that have been found to violate social justice norms even if those factors may have a predictive value in underwriting.

One of the panels that follows will discuss factors that may have a disparate impact on racial and ethic minorities or economic disadvantaged groups. When the benefits of predictive value of such classification are outweighed by social justice considerations, they may be an appropriate candidate for legislative action. The legislative process provides a check on the

underwriting process by setting standards after informed discussion of public policy concerning rating factors and an analysis of the actuarial significance of the pricing factor at issue and consideration of all interests at stake. These can be difficult questions because risk based pricing is designed to achieve legitimate busines purposes by tying risk to the price of insurance through actuarial science, by making pricing rational and by protecting against insurer insolvency.

You will also hear testimony about the definition of proxy discrimination. The NCOIL staff's proposed definition of that term can serve to quell confusion about the meaning of this term which recently has appeared in discussions about insurance underwriting particularly in relation to AI and algorithmic protections. Existing law forbids discrimination by using a characteristic without predictive power or a characteristic prohibited by law. If an insurer used a proxy for the purpose of discriminating based on a prohibited rating factor that conduct I submit would be forbidden under existing law. Nevertheless, this could be clarified through the NCOIL staff definition of proxy discrimination.

Whether underwriting decisions are made by humans or machines based on prohibited characteristics or factors chosen as proxies for them, intentional discrimination in underwriting based on race, religion or national origin is not lawful. The existing statutory framework for insurance ratemaking can and should be applied to stop discrimination based on race and consistently within this framework there is also precedent for legislative review and necessary action to address other rating factors that may violate public policy norms. Addressing racial injustice and providing financial protection against risks in a way that is actuarially sound, affordable, sustainable, responsible and accessible for all customers is important and I look forward to further discussion today about race in underwriting and the legislative framework for insurance ratemaking.

Birny Birnbaum, Director of the Center for Economic Justice (CEJ), thanked the Committee for the opportunity to speak and stated that for background purposes, he served as Chief Economist at the TX office of public insurance counsel (OPIC) and then associate commissioner for Policy and Research at the Texas Department of Insurance (TDI). He has deep technical, regulatory and policy experience. For the past 30 years, he has served as an expert witness and consultant to public agencies and consumer organizations on, among other things, unfair discrimination in insurance. He received his training in economic and statistical analysis at the Massachusetts Institute of Technology.

He stated he has no financial interest in the outcome of today's deliberations. He serves pro bono as the Director of the Center for Economic Justice as a consumer representative. As always, if there any doubts about the evidence and arguments he presents, he requested to be challenged on it and engaged. Mr. Birnbaum spoke a little bit about the Center for Economic Justice. They work on insurance issues because insurance is a miraculous tool for individual and community economic development and well-being and because insurance is the most important tool for resiliency and sustainability. They work on economic and racial justice in insurance to help make insurance available and affordable to the communities most in need of these essential financial tools.

So, lets talk about fair and unfair discrimination in insurance. First, discrimination is not a dirty word. Fair discrimination in insurance is important. Our focus today is on distinguishing between fair and unfair discrimination and how systemic racism in society leads to unintentional unfair discrimination in insurance against communities of color. The word unintentional is very important. Generally, fair discrimination means that there is an actuarial basis for treating

individual consumers or groups of consumers differently. We find this in rating statutes and unfair trade practices (UTP) statutes. Rating statutes typically define two types of unfair discrimination. One is actuarial meaning that there must be an actuarial basis for distinctions among groups of consumers. The second type is discriminating on the basis of a protected class characteristic regardless of actuarial basis. The UTP statutes typically define unfair discrimination based on a protected class characteristic. Both the NCOIL P&C Insurance Modernization Act and NAIC P&C Model Rating Law and state laws reflect these two types of unfair discrimination. NCOIL P&C modernization says "For the purpose of this Act, "Unfairly discriminatory" refers to rates that cannot be actuarially justified. It does not refer to rates that produce differences in premiums for policyholders with like loss exposures, so long as the rate reflects such differences with reasonable accuracy." And "No rate in a competitive market shall be considered unfairly discriminatory unless it violates the provisions of section 6(B) in that it classifies risk, on the basis of race, color creed, or national origin. Risks may be classified in any way except that no risk may be classified on the basis of race, color, creed, or national origin.

Similarly, the NAIC P&C model rating law says "Unfair discrimination exists if, after allowing for practical limitations, price differentials fail to reflect equitably the differences in expected losses and expenses." And "Risks may be grouped by classifications for the establishment of rates and minimum premiums. Classification rates may be modified to produce rates for individual risks in accordance with rating plans which establish standards for measuring variations in hazards or expense provisions, or both. Such standards may measure any differences among risks that can be demonstrated to have a probable effect upon losses or expenses. No risk classification, however, may be based upon race, creed, national origin or the religion of the insured."

The second type of unfair discrimination is discriminating on the basis of a protected class characteristic regardless of actuarial basis. So even if an insurer found an actuarial basis for using race as a factor in marketing, underwriting, claims settlement or antifraud, the laws prohibit that. And it is not just related to rating. If you were to discriminate in claims settlement on the basis of race that would also be a violation.   You'll note that neither model mentions the word "correlation." The reason that correlation is not mentioned is because the actuarial standard requires more than a correlation. A correlation is simply a relationship between two things. But that relationship may not be reliable. The correlation may be spurious, which means that the relationship is random and temporary. Like the example on slide 8 which shows an almost perfect correlation between the divorce rate in Maine and the per capita consumption of margarine. No one would suggest that this historical relationship is anything more than an anomaly and is reliable to predict the future.

Slides 9 and 10 show a spurious correlation in insurance. In the early 1990's, when Mr. Birnbaum was in TX working on these issues a company filed for a homeowners discount based on tenure with the company. The insurer presented a chart similar to the one on slide 9 showing a correlation – a declining loss ratio for policyholders with each additional year with the company. So, somebody who is with us for 5 years has a much lower loss ratio than someone with us for 1 year so we want to offer a tenure discount. It turned out that this was a spurious correlation because the data combined renters and homeowners insurance. When you looked at them separately you found that renters insurance was a consistently higher loss ratio than homeowners insurance. What happens is that with each year more and more renters drop off the book of business whereas homeowners tend to stay on longer. So, what the original chart was showing was simply a growing percentage of homeowners in the book of business with each year of tenure.

There's another important reason why a simple correlation does not meet the statutory rate standards and why insurers don't rely on simple correlations to develop prices. The reason is that various risk characteristics are correlated with one another. Here, we look at correlations between driver age and auto claims and marital status and auto claims and vehicle age and auto claims. Each of these represents a one-to-one relationship – a univariate analysis meaning one variable to predict the outcome. But since we are looking at each predictive variable separately and because the three predictive variables are highly correlated with one another, when we add the variables, we don't have an accurate indication because of overlap among the predictive variables. Stated differently, driver age is not only predicting auto claim frequency, but also predicting marital status. So, what insurers have done for at least the last 30 years is develop new techniques to address problems with univariate analysis. Insurers use a variety of techniques to eliminate correlations among predictive variables in order to isolate each individual predictive variable's unique contribution to explaining the outcome.

So, to give you an idea of where we are at now, a simple correlation is to today's insurance algorithms as a paper plane is to a Boeing 787. On slide 13, I list some of the techniques used by insurers. Each month, the NAIC Casualty and Actuarial Task Force holds a "book club" with a presentation on new techniques insurers are using for pricing. Here are some recent techniques presented: Families of Generalized Linear Models (Variations on Multiple Regression); Gradient Boosting Models; Machine Learning; Hyperparameter Tuning; Neural Networks; Generative Adversarial Networks. Accordingly, the concept of simple correlations, if it ever existed, is simply outdated.

So, how does a multivariate analysis work? Here's a simple illustration of a multivariate model. Let's create a simple model to predict the likelihood of an auto claim: $b0 + b1X1 + b2X2 + b3X3 + e = y$. X1, X2 + X3 are the predictive variables trying to predict y. Say that X1, X2 + X3 are age, marital status 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. The important thing is that by analyzing these predictive variables simultaneously, the model removes the correlation among the predictive variables. By analyzing them simultaneously we're better able to get the unique and independent contribution of each variable to explaining the outcome.

How do we even improve the multivariate analysis. Here is what insures so. Suppose an insurer want to control for certain factors that might distort the analysis? For example, an insurer developing a national auto insurance pricing model would want to control for different state effects like different age distributions, different minimum limits requirements and differences in jurisprudence. An insurer would add one or more control variables. They add another variable to the model and in this case lets call it "state." By including State as a control variable, the correlation of the Xs to State is statistically removed and the new b values are now the contribution of the Xs, independent of their correlation to State, to explaining the likelihood of a claim. So the fact that one state has a much older population than another wont distort the outcomes.

Let's get to the issue of proxy discrimination, a concept the Committee is familiar with because when state legislatures develop legislative districts – for state and federal legislators – they use proxies to identify how people will vote. The party in power seeks to maximize the number of districts whose voters will likely vote for members of their party. So, this is not a radical concept by any stretch of the imagination. But lets look at proxy discrimination against a protected class in insurance. The terms "proxy discrimination against a protected class" and "disparate impact"

mean the same – discriminating on the basis of a protected class characteristic using a proxy for the protected class characteristic. I hope we agree that denying coverage or otherwise discriminating against consumers because they are Black Americans or Evangelical Christians is unfair discrimination in insurance. Suppose now that we are in an era of Big Data where insurers have access to massive amounts of personal consumer information, that I found a perfect proxy for either of these protected class characteristics and the effect is identical to discriminating directly on the basis of the protected class characteristics. Should a regulator stop the use of these proxy variables on the basis of discriminating against a protected class? The insurance industry says no – the regulator has no such authority but that of course defeats the purpose of the statutory prohibition against discriminating against protected classes. Regulators disagree with the industry on that position as well.

So, what is systemic racism and how does that play into this? Insurance company CEO's recognize the impact of systemic racism. For example the CEO of American Family said "Floyd's death in Minneapolis is the latest example of "a broken society, fueled by a variety of factors but all connected by inherent bias and systemic racism. Society must take action on multiple levels and in new ways. It also requires people of privilege—white people—to stand up for and stand with our communities like we never have before." So, why do state and federal laws prohibit discrimination on the basis of race? The earlier speaker stated it is because it is abhorrent. Is it just because it offends us? The answer is of course not – it is much deeper than that. Justice Kennedy for the Majority in the U.S. Supreme Court's 2015 Inclusive Communities Opinion upholding disparate impact as unfair discrimination under the Fair Housing Act said "recognition of disparate impact liability under the FHA lays an important role in uncovering discriminatory intent but it also permits plaintiffs to counteract unconscious prejudices and disguised animus that escape easy classification as disparate treatment." So, here, Justice Kennedy is saying that just looking at intentional discrimination – disparate treatment – was not enough. Prohibitions against unfair discrimination on the basis of race require analysis of disparate impact. Justice Kennedy understood that the legacy of historical discrimination continues today in systemic ways. In some cases directly, some cases, indirectly, unconsciously, and unintentionally.

We continue to see those legacies today – directly and indirectly. Policing and criminal justice; housing; and impacts of COVID. The prohibition against discriminating on the basis of race regardless of actuarial basis in insurance laws is also a recognition of intentional discrimination. Insurance is not immune to systemic racism. There are examples of practices that clearly have a disparate racial impact because they rely upon data in development of the algorithms that are highly biased on the basis of race. But, we have a solution and the solution is not an either or – it's not down to a choice between prohibiting a factor or permitting a factor. The tool to identify unintentional discrimination or proxy discrimination against protected classes is disparate impact analysis. Disparate impact is both the standard for determining whether proxy discrimination is present and a methodology for identifying and minimizing that proxy discrimination within that risk based framework of insurance. So, if we go back to the model earlier – if we put in race as a control factor instead of state we now are able to remove the correlation between our predictive variables and rates. What this does is minimize the racial bias while managing the risk and focus of insurance. In fact, by eliminating correlations with race, we improve risk based pricing.

There is a long history and many approaches to identifying and minimizing disparate impact in employment, credit and even in insurance but the general principle is to identify and remove correlations between protected class characteristics and the predictive variables. So, what if X1, X2 and X3 are not perfect proxies for race, but are somewhat of a proxy for race? Then, the

disparate impact analysis – and our simple model – removes that correlation and the remaining values for b1, b2 and b3 are the unique contributions of each predictive variable to explaining the outcome. The result is more – not less – accurate cost-based or risk-based analysis. Why is it reasonable and necessary to recognize disparate impact as unfair discrimination in insurance? There are at least three reasons. First, it makes no sense to permit insurers to do indirectly what they are prohibited from doing directly. If we don't want insurers to discriminate on the basis of race, why would we ignore practices that have the same effect? Second, it improves risk-based and cost-based practices. Third, in an era of Big Data, systemic racism means that there are no "facially-neutral" factors. The big data mining activities often reflect and perpetuate historical patterns of inequity.

Mr. Birnbaum stated that he would like to finished by emphasizing that some of the things that insurers do is a function of their models not trying to predict risk but trying to predict non risk outcomes. Here are some quotes from what insurance executives have told investment analysists. In 2005, the CEO of Allstate explained how they identify the right and wrong types of consumers. Here, he was talking about the use of credit scoring. "Tiered pricing helps us attract higher lifetime value customers who buy more products and stay with us for a longer period of time. That's Nirvana for an insurance company. Tiered pricing has several very good, very positive effects on our business. It enables us to attract really high quality customers to our book of business. The key, of course, is if 23% or 20% of the American public shops, some will shop every six months in order to save a buck on a six-month auto policy. That's not exactly the kind of customer that we want. So, the key is to use our drawing mechanisms and our tiered pricing to find out of that 20% or 23%, to find those that are unhappy with their current carrier, are likely to stay with us longer, likely to buy multiple products and that's where tiered pricing and a good advertising campaign comes in." These statements were made in the Stone Age of Big Data – 2005.

In 2017, the CEO of Allstate said the "universal consumer view" keeps track of information on 125 million households, or 300 million-plus people. "When you call now they'll know you and know you in some ways that they will surprise you, and give them the ability to provide more value added, so we call it the trusted adviser initiative." Just last month, Progressive's CEO in response to a question from an investment analyst said "yes, we have -- we do incentives and we have different commissions based on the type of customer that we get in namely preferred." So, there are a number of practices that raise concerns about proxy discrimination on the basis of race. One is the increasing use of customer lifetime value scores. By definition, these are algorithms used by insurers that use non cost factors to differentiate among consumers and the factors and data reflect bias against communities of color. Credit based insurance scores reflect that consumer credit data has a disproportionate bias on the basis of race. With criminal history scores, you just have to read some of the DOJ reports on discrimination in policing and you know that criminal history scores will also be based on bias data.

So, what are the benefits and costs of requiring insurers to test for and minimize disparate impact? If racial and economic justice are a priority, if cost-based insurer practices are a priority, if closing the protection gap and making insurance more affordable and available in traditionally underserved communities, then the benefits of requiring insurers to test for and minimize disparate impact far, far outweigh the costs. While there are examples of disparate impact claims brought against insurers under the federal Fair Housing Act that have resulted in improved risk-based pricing, for example challenges based on age and value of the home, industry has not been able to cite a single example of a successful disparate impact claim that has harmed risk-based pricing.

Mr. Birnbaum stated that he would like to close by stating that it is not only reasonable and necessary to test for disparate impact in pricing but in every aspect of an insurers operations. Today's Big Data algorithms and variety of marketing channels give insurers – like other businesses – the ability to micro-target consumers. This ability to micro-target gives insurers the ability to attract or discourage customers even before the pricing stage. Perhaps the area of must concern for us is with claims settlement and antifraud. The goal here is not to punish insurers, but to engage insurers in efforts to identify and minimize systemic racism. We don't claim that insurers are looking for ways to indirectly discriminate against communities of color. Rather, it's about getting insurers to examine their practices for unintentional discrimination and to change those practices within the risk-based framework of insurance. Disparate impact analysis improves, not harms, risk-based practices.

I began by talking about why CEJ works on insurance issues – because insurance is a fundamental economic development and resiliency tool for individuals, businesses and communities. Just as lenders and employers are required to test for unintentional discrimination on the basis of race, so should such testing be part of the DNA of insurers. It is not a great burden on insurers to consider racial impacts as they develop algorithms for marketing, pricing, claims settlement and antifraud. The goal is not to eliminate rating factors, but to eliminate the unneeded racial impact of those factors – it's not a binary choice. The draft amendments to the NCOIL P&C Insurance Modernization Model law fails because it refers only to intentional proxy discrimination. The entire premise of disparate impact analysis is to unearth unintentional discrimination.

Dr. Lawrence "Lars" Powell, Director at the University of Alabama Center for Insurance Information and Research (Center), stated that the Center solves insurance problems with research and education. Dr. Powell stated that the first piece of data he brought is a picture that maps more than 4,000 gatherings of the Black Lives Matter (BLM) movement just in 2020 in the U.S. Nearly every population center in the country is represented and he is not sure if it's gathered scientifically but there is no reason to believe its wrong and it suggests that the problem is important. This is an important part in the history of the country where we have opportunities to make changes where we have the attention of people at all levels of gov't and its important that we move now to improve on this important area. Like with the pandemic what we hear is that we should follow science and data and that is what I want to bring today. As a spoiler on conclusions, while the industry is not perfect the science data of which he is aware of and works with on a daily basis don't currently indicate big problems in insurance especially how it is underwritten and priced.

Dr. Powell stated that he will cover incentives, safety – which is something not often discussed with insurance underwriting and pricing but the two are very much aligned – and evidence. Starting with insurance incentives, if you start with a dollar bill because as an economist that is probably what you would expect him to say is that the only thing an insurance company cares about is making a profit or increasing some sort of performance measure. At the highest level that is true but insurance companies are also run by people and people are imperfect. We have seen over history examples of people bringing their own prejudices and biases into businesses even the insurance business. As long as people are performing functions of companies it is something we need to be vigilant of and investigate and when we find something such as unfair discrimination it is important that we act on it and make sure it doesn't continue. As more transactions begin to occur without people touching them, we have less opportunity to inject our personal biases although there is a possibility of bringing in historical biases that show up in the data. Dr. Powell stated that didn't pay super close attention to Mr. Birnbaum's presentation but he bets he said that. Dr. Powell is not dismissing that but as AI and data analysts get better

those are things that we can detect and get rid of in processes like claims and underwriting and customer service

We talked about insurance rating laws and I will restate that the law in all states state that insurance rates need to be accurate and reflect price or reflect risk and cost. This is not something we want to change. Fair discrimination is what makes insurance work. If we cannot classify policyholders or risks into like categories and charge premiums that are commensurate with that risk then the insurance mechanism breaks down and we lose this very economically necessary part of our economy and our daily lives. One thing I want to give you as not my opinion but just some math is that if members of a protected class have more insured losses than people who do not belong to that class, the use of accurate rating variables will cause protected classes to have higher average insurance premiums. I haven't seen any evidence that shows protected classes are more likely to crash a car because they belong to a protected class. That would be hard to accept. This is largely driven by location. Where you live and where you drive are among the, if not the most, predictive factor for rating auto insurance. It is also very predictive of rating for homeowner or property insurance.

One of the things that we hear as an objection to these measures such as location that result in having people pay more is why don't we just look at the way people drive and use driving variables. So, if you crash your car your rate goes up. There is a great reason – it is because these observed driving behaviors don't provide much information at all. We don't get a very complete picture of how people drive or their propensity to crash just by looking at driving factors. The info they do produce is produced quite slowly over time. For example, if we look at the very worst class of drivers – the riskiest class such as 15 year old males who were just licensed to drive – 20% of that class crashes their car in a given year. The graphic shows that 20% crash and 80% don't crash and you could just as easily say if you're only using driving factors that you have 20% who are correctly classified and 20% who are misclassified. That is in the riskiest group and the one it might be most important to classify.

What about the average driver – the average driver has a 3.5% chance of crashing in a given year so it is going to be quite awhile before we know much at all about these average drivers but we do know these things. We know a lot about people and their propensity to crash because we have these continuous and instant measures of the likelihood of crashing such as where you live and where you drive and your insurance based credit score and age. Driving history is a factor but is actually not as predictive as people think. So, in a lot of ways these arguments about driving history and driving factors and the complaints about non-driving factors is very much a red-herring. It is something you can say that gets uninformed people very interested in helping you make a case.

Lets talk about driving actors. The best driving factors are telematics. If you really want your insurance company to know just how you drive and rate you based on that – that option is available. The last data he could find shows about 5% of current insured drivers take up this option of having a telematic on their cell phone or using the thing to plug into your car. Maybe people aren't aware of this and maybe there needs to be a better job in explaining it. As someone who has turned on the TV in the last 10 years, I have seen a commercial for this. They don't hide this very well that you can get different telematics form different insurers but the reason why this matters and why we don't want to give up on risk based pricing and having accurate insurance pricing is because when the price is less than the risk that its covering your incentive to take risk or care increases. You don't have this marginal incentive of if I don't drive safely I will have to pay more for my insurance. Or my insurance price isn't that high so if it goes up what's the big deal. Indeed, we find that people are able to drive a lot better than they

do on average. We know that by looking at telematics. During the 6 months when the device is in your car and you are being evaluated as a driver, people crash much less and drive more carefully. Nobody is surprised by this and it is funny that a lot of people probably think they may not want the device because they don't want to drive the speed limit and brake very carefully especially if they are late to work one day.

Its better to have incentives that make people want to drive better and safer. I am not just saying this because I think it is intuitive and makes sense although I do think its intuitive and makes sense. There are several very well known peer reviewed published academic articles that find that less accurate prices cause losses to increase. More people crash their cars and more people are injured on the job when regulations say you cannot raises rates for whatever reason – when rates don't follow risk. It increases the overall cost and it increases the number of people that have their property damaged, injured and who die. These are good reasons to stick with risk based pricing.

So, what do we do if we don't like to see a differential between some classes and others in crashes. We don't want to see anyone crash. Lets address losses. I do a lot of work with transportation engineers doing some cross disciplinary work and they say it seems silly to change the price of insurance when the losses are there and we have these levers we can pull to decrease the losses. Lets go to these places where people are driving and crashing and replace stop signs with stop lights and add turn lanes and replace the most dangerous intersections with roundabouts. Data shows that such things reduce crashes and save lives. Another issue that my traffic engineering colleagues have found is that some of the differences across groups by a protected class or by income is vehicle maintenance. Driving on tires that you know are going to pop or bust if you get on a highway and go 70 mph is a guaranteed crash and if you don't evaluate the tread on your tires which is a very simple thing to do and there are several public education programs that have spread awareness of things like tire tread and vehicle maintenance and it has shown to make a big difference in the reduction of crashes.

Dr. Powell stated that a handful of studies have come up in the last 5 years that claim to find unfair discrimination and all of the studies have something in common and that is that they don't control appropriately or accurately for the risk of loss. I want to walk through these methodological problems because this is the science that we talk about and want to talk about and address. The way that these studies define risk has been a problem. In some instances they define good drivers and then compare good drivers to bad drivers. In some instances they look at small zip codes where you expect to have a large variation in outcomes and then compare those small zip codes to large zip codes where you don't have a credible number and a lot of the time it is comparing the premium per car without taking into consideration the loss ratio.

Lets start with the Massachusetts Attorney General report in 2018. Nothing about it was dishonest or disingenuous but the skillset that you have to have in order to do a study on something like this is unique. There are not a lot of people that get a Ph.D. anything but especially in risk and insurance. The report compared the zip codes with the highest minority population with the zip codes with the lowest minority population. In a control for loss they go from all drivers on one side to experienced drivers which is drivers with more than 6 years of driving experience and then experienced drivers with excellent driving records which is people that haven't had a moving violation or a crash in 6 years. We just covered this on another slide but what they conclude is that even good drivers are charged more and they imply that is based on their membership in a protected class.

If we do a little math, lets assume that there is a 10% chance of any driver in this high risk location crashing per year. So over 6 years if we do the math with a 10% chance of loss about 53% of people would have had a claim or moving violation and that leaves 47% of people that are still high risk drivers but haven't been identified by this metric yet. So, what's going on is that we are choosing an excellent driver as one of the bad drivers who hasn't had a loss yet. We don't have to call them a bad driver - you could be a good driver who drives in high risk locations so you are more likely to crash. Because you haven't crashed doesn't necessarily make you less likely to crash going forward. There is about a 50% chance you wouldn't have crashed if 6 years of not crashing is the entirety of your risk measure. Moving onto a study done by ProPublica I believe in 2017, the paper looks at zip codes and defines zip codes as being a minority zip code or non minority or white zip code. A graphic from the study shows premiums on the y axis and losses on the x axis. We see that the minority trend is higher but what's going on here? The line that follows the white neighborhoods goes up with losses and then it goes down. This is Geico and suggesting that Warren Buffet doesn't like to make money because he has chosen to charge white neighborhoods less. That doesn't pass the sniff test. If that was the case it would be abhorrent and we would want to do something about it but we should be open to the idea that maybe something else is going on.

A doctor from the Missouri DOI who I believe has PhD in math or statistics produced a response to this where he takes the same data and makes a different chart. The ProPublica study draws its conclusions within those two red lines that go straight up and down between $250-$400 of loss per year so they have already thrown out the bulk of these non-minority neighborhoods where you see before that a red line in upward trends where premiums tend to appear to depend very much on loss. So you throw all those out and then you look at those only where there appears to be a negative relationship between losses and premiums for the non minority neighborhoods. So, what we have going on here is lets say a zip code has a set number of cars in it – there is a number of vehicles you have to have to get to what is called credibility in a number. When you look at these small zip codes if you have say 50 cars in a zip code and 10 of them have a loss one year and then one of them have a loss for 3 or 4 years well if you happen to catch the year when there were 10 losses the losses per car are going to be really high but their expected risk is going to be really low so you get these observations that are far to the southeast of the chart.

You also see some that are very high on the premiums and very low on the loss and the demographics work out this way that in high minority zip codes you have densely populated places with very credible data and you see again about the same upward trend and relationship between loss and premium. What's also instructive here is that when you look at where the overall result is coming from – its southeast of the blue line because anything below that line is losing money. I find it difficult to say the insurance industry has a systemic problem because they are trying to lose money on a lot of zip codes because they have more white people in them. That seems farfetched and I don't know what brings people to that conclusion. It seems much more obvious that we have a credibility problem with the data. The Missouri doctor went on to perform his own analysis where he pulled a lot of zip codes together by minority population percentage. He pulled 5 years of data together and looked at the loss ratio and what he found was a negative correlation between a minority percentage of the population and price meaning the higher the minority population as percentage of population in a zip code the smaller is the price they pay relative to the loss. That is what the law suggests we are after when we price insurance.

To summarize, its an important topic and I'm not here to minimize it but there are ways that these things happen. Its not impossible to have unfair discrimination in insurance because

while insures have an incentive to be accurate they are also run by people who are imperfect and could potentially impose their own biases and prejudice on the outcome. We're right to be here and vigilant about it but the data that I have seen does not show it there in a measurable and detectable manner. Rating laws require accurate prices and that is a good thing because accurate risk based prices improve the safety of people who are driving or owning homes, etc. The studies' math that claims to show unfair discrimination, every one I have found and reviewed, and I am happy to review others, does not control well for risk and vice versa – every study that controls well for risk does not find unfair discrimination. That's what the data shows. If data showed different then I would be the first person to bring this to your attention and say we need to do something about but its not there.

Dr. Powell stated that there were one or two things heard in the earlier presentations that in the risk of accuracy and data based conclusions he would like to comment on. One of things heard was that if we went through an exercise of removing intentionally the correlation between race or any other protected class and losses when making insurance rates assuming the correlation exists. We were told that makes rating models more accurate. That is simply false. That is taking information out of the model and making it less accurate. That is said unequivocally and is a mathematical identity and not his opinion. It does not improve risk based pricing. Another thing heard was that its inappropriate to have membership in a protected class correlate with prices. Well, we have legally and for the better carved out race and religion and ethnicity as predictors of loss or rates and we have not carved them out as correlates. Like an earlier slide said, if there are differences in losses then any accurate rating variable is going to produce a difference in premium. The purpose of not using membership in protected classes in rating is so that you cant just arbitrarily say well, lets make this group pay more. It makes it impossible to do this and it means you have to correlate things with loss and that is what the whole actuarial process and whole rate review process that the laws govern follows – making sure that these factors are correlative with losses and premiums reflect losses.

Lastly, the amount by which any variable that is used in insurance ratemaking whether it be credit scoring or criminal history or age or anything else – the amount by which that affects the price of insurance is not arbitrary. Its based on how these measures vary with insurance losses. We saw an impressive list of methodologies that insurance companies use to make sure those correlations are isolated and that they are accurate. It seems that some folks want to say that they are used for proxies for something else – its used as an accurate rating variable and if we want rates to be accurate so that we have better safety and outcomes that people see as fair then that is the way the insurance mechanism works best. It is not an arbitrary amount by which we can increase someone rates because they are in a protected class – its all based on the correlation with losses.

Rep. Lehman stated his question is wrapped into a statement. Dr. Powell made a statement that the best indicator of rate is telematics. If that is in fact the case, it leads to the death of the law of large numbers and if we move in that direction does it not send many of these issues by the wayside because the data is purely focused on how someone drives? Rep. Lehman then addressed Mr. Birnbaum's statement about data mining and Rep. Lehman stated that he looks at it as insurers are getting more and more data to try and be accurate in rating but how does that differ from what Apple and Google and Amazon do? They know everything about you with regard to purchasing habits and other things. So, is this something unique to the insurance industry? With all due respect to Mr. Birnbaum, he made it sounds like wanting the best consumer is a bad thing. Every entity out there does the same thing whether it be retail or services industries.

Mr. Birnbaum stated that the difference between insurance companies doing data mining and Amazon and others is that Amazon and others aren't required to do cost based pricing. They can use data mining to extract profits from any group of consumers they want. The part that's relevant for insurance is that its not that data mining is bad in terms of identifying cost drivers – it becomes bad where the data mining is used on non cost factors. So, when you look at things like customer lifetime value scores or price optimization scores those aren't based on risk or cost factors they are based on non cost factors that are highly correlated with race and that is where the problem comes in. In terms of the other issue raised in terms of does this eliminate the law of large numbers, there is a distinction between an insurance company that insurers 1 million vehicles and by insuring 1 million vehicles they have the law of large numbers. When it comes to then assigning premiums to different vehicles within that pool, that's where they want to identify people who are more risky than other and issuing higher premiums for that. But, assigning premium to different groups of consumers doesn't violate the law of large numbers because you have a book of business that is 1 million.

The other thing Mr. Birnbaum wanted to respond to quickly was some of the strawman arguments that Dr. Powell made and it is not clear what the point was because he made a number of arguments that no one else is really arguing and then he attempts to refute the strawman arguments. One was that some people want insurers to ignore some variables and give up on risk based pricing. No one is really arguing to eliminate risk based pricing or practices. Consumer and civil rights groups are arguing that unintentional discrimination on the basis of race harms both communities of color and risk based pricing and we also argue against the use of non risk related factors in pricing – practices like customer lifetime value scores.

Dr. Powell criticizes various studies showing racial impacts of insurer pricing and claims that the studies fail because losses aren't considered. There are two problems with that argument. First is that the studies do control for loss because they use price to reflect losses just as insurers do. They control for losses by saying that the only factors we are going to vary are the particular attributes under consideration like credit score or gender and they hold everything else constant. Dr. Powell makes some basic mistakes – he equated a higher loss ratio with lower price. In fact, a higher loss ratio may reflect higher prices because it is in a higher claims area. The other mistake he makes is that every study that controls for risk does not find unfair discrimination – that is simply false. The Texas and the FTC studies on credit scores both found a disparate impact as well as a relationship between credit scores and risk of loss.

So, there are a number of problems the most important of which is a claim that any time you add a variable to a model it improves the accuracy of the model. That is not true from a statistical standpoint. And most important, insures introduce variables into models to increase the accuracy of the models yet with the specific intent of not to deploy that variable. So, the idea of using control variables that Dr. Powell said was wrong is in fact a solid and used statistical technique. In fact, insurers presented the use of control variables in their presentations to CASTF. So, although Dr. Powell raises a number of interesting issues it is generally unclear what his point is because the arguments that he is refuting are arguments that Mr. Birnbaum does not know anyone is making and it doesn't really address the issue of how do you attack unintentional discrimination on the basis of race in insurance. His solution seems to be ignore it because insurers don't discriminate and in fact there is plenty of evidence to show that there is that type of unintentional discrimination.

Rep. Lehman stated that he would like an answer to his telematics question. Dr. Powell stated that one of the things that Mr. Birnbaum mentioned which is correct is that there are a lot of people with cars that buy insurance – something like 220 million vehicles insured in the U.S.

So, even if we start classifying people by telematics and all these minute variables about how they drive it still doesn't make an individual label for every person. You are still classifying people into similar groups you just have a lot more information about how they drive. The concern about micro-segmentation is not that its unreasonable – we could see an issue where there are so many classes that the usefulness of those classes in a statistical sense breaks down and the law of large numbers doesn't apply as readily although you don't have to have exactly the same thing in every class for the law of large numbers to work but at that point it is not clear how the insured benefits from using it. If for some reason we are able to identify a person who is 100% likely to go out and cause a multi car fatality crash then I would say that is a great thing and we should make sure they don't drive. We're not there yet and if we were to get there technologically then we would have to make some important choices about how we deploy those things. In response to Mr. Birnbaum's comments, Dr. Powell said that he is certain what he said is right and that Mr. Birnbaum is wrong and that he would be happy to provide more detail on that if requested.

Rep. Lehman stated that he looks forward to discussing the issues surrounding telematics further. Sen. Breslin noted that reasonable minds can differ on these issues and he thanked the three speakers for their remarks.

Asm. Kevin Cahill (NY), NCOIL Treasurer, thanked the speakers and stated that they bring up some interesting points. Asm. Cahill stated that he would like to reflect upon what happens in the NY Assembly Insurance Committee during his experience as Chair of said Committee. Often times when colleagues come to him from one end of the spectrum and ask for specific measures to be implemented under the law he tells them that insurance starts with math. We always start with math and then layer on top of that our policy but we can never ignore the math. That doesn't mean that we have to slavishly adhere to the math it means that we recognize that insurance is based on math and we cant put insurance companies in a position where they will absolutely lose money if we expect them to continue to exist. It is in that context that he offers his comments today.

Asm. Cahill stated that he does not want to have a two person debate be the center of today's meeting but Dr. Powell did preface his comments by saying he didn't pay much attention to Mr. Birnbaums presentation and then preceded to argue against some of the arguments Mr. Birnbaum raised so it is perfectly legitimate for Mr. Birnbaum to respond in kind. Asm. Cahill stated that he would like to ask Mr. Birnbaum a question regarding a term he has used a couple of times when it comes to discrimination. He talked about systematic discrimination and unintentional discrimination and harmful discrimination. Would a more appropriate term be passive rather than unintentional discrimination because of those of us who are determined to say everything is fine and there is no problem we are not doing anything on unintentional we are simply not doing anything.

Mr. Birnbaum stated that is a really good characterization of the issue and it is probably best illustrated in the difference in how unfair discrimination is treated in insurance from other financial service or employer issues. If you are a lender or employer you have to proactively test your processes to look for unintentional or proxy discrimination. With insurance there is no requirement for that so insurers simply don't engage in that process. Referencing back to presentations that different companies make to the CASTF book club in which they talk about their various algorithms and techniques, one presentation was by a company that engaged in telematics. After the presentation I asked if they did any testing to see if the offer of the telematics was unbiased so that the data gathering wasn't biased and did you test the algorithms to see if there was any bias on the basis of race. They replied no since they are not

required to do that. That gets at a passive discrimination that Asm. Cahill referred to which is that we are not asking companies to abandon risk based pricing we are asking companies to invigorate risk based pricing by looking at these passive correlations and passive discrimination on the basis of race that nobody wants but you have to take action to see if it exists.

Asm. Cahill thanked Mr. Birnbaum for his comments and stated that he wants to make sure that there is an understanding of what the industry is responsible for and what legislators are responsible for are not exactly the same thing. Yes, insurance companies should maximize profits for shareholders or mutual benefit holders or whatever their corporate structure is and they should also ensure they maintain appropriate reserves and are solvent and able to pay claims. Legislators are required to layer policy on top of that and recognize that when we do so we do so in a way that overcomes systemic and passive discriminatory issues in the system. We do it with great frequency and regularity. If we didn't we wouldn't have flood insurance and we wouldn't have homeowners insurance for a lot of people. In trying to reflect upon the presentations, Asm. Cahill stated that he is getting the impression that to sum up, the point is being made by some is that here is no problem. If that is what is being said, Asm. Cahill asked for remarks as to where there is room for improvement and where legislators can step in to fix whatever may be broken.

Ms. Foggan stated that she thinks there are solutions in existing law that are perhaps being overlooked to some extent. There are tools that are available that do prohibit discrimination and are available for regulators to review circumstances where intentional discrimination is happening whether it is happening based on direct use of a classification or whether it is happening based on purposeful use of a proxy with the intention of discriminating so I think there is something to be said there about existing tools not being perhaps fully utilized. I also think that there are dialogues going on between regulators and companies about new algorithms that are being proposed and innovations in insurance rating and those dialogues are important and they are the start of figuring out how innovation may affect insurance going forward. A cautionary note is to keep in mind the fact that sometimes some solutions that are proposed may stifle that innovation. We have instances where restrictions on rating factors may stifle the usage. These are areas where very serious thought needs to be given to any other action that would be taken.

Ms. Foggan further stated that it is important to reinforce that the actuarial justification standard is a very important standard and there were a lot of comments made about the idea that factors that are not risk based are being used and to the extent that is true and the factors are not actuarially justified I think they are forbidden under current standards and that is something that can and should be pursued. That is a point that perhaps is lost that in risk based pricing by definition insurers are responsible for providing a justification for use of a factor and that is the actuarial justification for the use of a factor.

Dr. Powell stated that one of things that we have seen some positive benefits from on a small scale is that his Center teamed up with a financial literacy effort from another place on campus where they go into underserved or underprivileged communities and run a financial literacy program that is pretty well attended. Dr. Powell's staff added a portion to that where they would walk people through the process of shopping for insurance online. It doesn't take very long and a lot of them will do it right there with provided tablets and computers and then Dr. Powell's staff will follow up with them months later to see whose insurance premiums have gone down or up and the results were very good. With limited resources that was able to be done in about 5 or 6 counties in Alabama and there is a lot of promise there. The very best consumer tool in many cases for resolving an insurance problem is the ACORD application or going to the market and

seeing if you can find a company that has an appetite or a preference for your risk. When you align with the optimal company you will often get the optimal result. Dr. Powell stated that he is happy to share the data from that and would encourage folks in other states to consider this sort of thing especially if threre is an existing financial program to piggy back on.

Rep. George Keiser (ND) stated that he is good friends with Mr. Birnbaum and has been debating these issues on the national scene for a couple of months now and they have different perspectives certainly. One of the points that needs to be made is that all insurance is intentionally discriminatory. There isn't an insurance product that isn't. You can look at me and see that based on my age that if I want to buy life insurance or long term care insurance today the premium is going to be significantly higher than for other folks in this group except for perhaps the Chair. It is discriminatory and I am going to pay a higher premium and it is justifiable. That is a critical point. Mr. Birnbaum did an excellent job in showing the multivariate analysis design. I know you are not statisticians but It is imperative that you understand that given any set of data regardless of how large it is – it still represents that data has 100% variability. We can factor off different parts of it into their contribution to that total variability. That is the $x1, x2, x3, x4$ categories. The key there is that in reality given the law of large numbers that was referred to earlier you can have a correlation of 0.1 even 0.5 that if your sample size is large enough it can be statistically significant. If a company chooses to use that variable for underwriting they are going to lose a lot money because it is not contributing to the overall risk in a significant manner.

To understand its contribution to overall risk you use the coefficient of determination which is the r factor squared. A 0.1 correlation may be statistically significant. It will account for 1/100th of the variability in that data. So, that is the risk side of going too far and why I support the original model which is intentional discrimination. The reality is, I am going to be able with the law of large numbers to show a statistically significant correlation between race and almost any variable in that factor cluster. So, I can show it and argue that is disparate impact and we shouldn't be using that factor. That will totally disrupt the underwriting process and be entirely on the defensive and will eliminate the opportunity for a lot of creative function in the future. I encourage the Committee to understand the impact of limiting factors because they may have a relatively minor correlation but statistically significant correlation with disparate impact or a minority group. Rep. Keiser asked Mr. Birnbaum to comment on that.

Mr. Birnbaum stated that it has been an honor to know and work with Rep. Keiser over the years and he appreciates him digging into some of the details of the statistical analysis of a multivariate analysis. The one area where Mr. Birnbaum disagrees is that if you start with a bunch of variables in lets say a credit scoring model with credit scoring vendors. They look at all of the factors that are in a consumer credit report and transform that into 300-400 different variables and then they data mine the different variables to find the ones that are most predictive and then they analyze those that are most predictive simultaneously because they want to make sure that the variables aren't replicating one another. They want to identify the unique contribution of one particular credit variable to another so that when you look at the credit scoring models that companies submit they only have about 10-15 variables out of the possibility of 300-400 and the reason that they do that is because just adding variables doesn't necessarily help. But when they do the analysis they analyze all the variables simultaneously so the disparate impact analysis that I showed – lets take 3 scenarios.

The first scenario is if one variable is a perfect proxy for race. In that case when you insert race that initial variable turns out to not be predictive because all its doing is predicting race and its not predicting claims. Now lets try a second scenario where there is some correlation between

that variable and race but there is some correlation between that variable and the outcome. In that case what the model does is reduce or changes the contribution of that first variable to eliminate the correlation with race and leaves the unique contribution of that variable. All of this is by way to explain that by introducing race and doing disparate impact analysis you are not eliminating factors unless they are truly perfect proxies for ace. What you are doing is minimizing the unintentional or passive discrimination Asm. Cahill talked about and you are improving the risk based pricing of those remaining factors because you are identifying and isolating the unique contribution of that factor to predicting that outcome and hopefully that outcome is expected claims.

Mr. Birnbaum stated that he agrees with Rep. Keiser 1000% in that insurance is all about fair discrimination and all about identifying the most and least risky consumers to not only price it accurately but to give consumers the right price signals so that they can engage in loss prevention activities. Remember that insurance is the most important tool that we have to promote loss mitigation and loss prevention. That is why for example people are charged more for having a DUI or having accidents and that is why people have discounts for having hail or wind resistant roofs. That is all part of the insurance mechanism and that is why we work so hard on insurance because it helps people get more resilient and communities more resilient. It is not just for protecting loved ones its for making sure you can recover when that inevitable catastrophic event occurs.

The Committee then took a 10 minute break.

DISCUSSION ON DEFINITION OF PROXY DISCRIMINATION

Professor Anya Prince at the University of Iowa College of Law thanked the Committee for the opportunity to speak on these important topics. Prof. Prince stated that through the last panel we heard the perspective of insurance regulation both historically and up to today. However, we are at a moment in history that challenges us to reexamine some of these frameworks in light of changing norms. In the past few years there has been a growing recognition of the need to address concerns of systemic racism throughout our society and additionally there has been an increase in the use of AI and big data in both insurance and beyond. Increased use of this technology however raises concerns that past historical harms will be perpetuated if technology is not introduced with care. As has already been spoken about several times today, AI raises a host of concerns from bias in data to transparency. While all of these concerns are essential to address today I would like to use my time to talk about one very particular concern of AI defined one particular way and that is proxy discrimination.

Prof. Prince stated that if further reference is needed she will be pulling her remarks from a paper she wrote with Prof. Dan Schwarcz regarding proxy discrimination in the age of AI and big data. This is not an issue unique to insurance – the paper was written about the problem at large in society but Prof. Prince said she will focus in on the insurance implications. Regarding the definition of proxy discrimination, as discussed, part of proxy discrimination does tie into disparate impact that is the use of a facially neutral trait in an algorithm that disproportionately harms a protected class but as noted in the paper we don't think that is all of the definition. The definition also has to include that the usefulness and predictive power of the proxy variable comes from the fact that it is correlated to a legally protected characteristic. Notably, in the paper, disparate impact and proxy discrimination are not completely synonymous but rather proxy discrimination is a specific subset of disparate impact.

Before proceeding with examples, Prof. Prince noted that this is a gross oversimplification of these problems given the complexities of multivariate analysis. Lets say that a life insurer is using an algorithm in their model and they find that somebody's Facebook likes are predictive of mortality. There is not anything in particular that would make us imagine that Facebook likes are actually causative of mortality and we may find by digging in deeper that the reason that Facebook likes is predictive of mortality is actually because its proxying for race and that can come up in all sorts of protective traits. We can think of auto insurance where if you are using all sorts of big data in underwriting such as receipts form men's clothing stores which is predictive of auto claims and then you find out that its not that you shop at a men's clothing store but that its predictive because of its tie to gender. In both of those examples it is because they are correlated to the protected trait that's really important and the second part of that is that the protected trait is indeed predictive of auto claims and mortality for all sorts of problematic social reasons in the past. That is the issue to focus on.

Prof. Prince then discussed a chart to contextualize the definition of proxy discrimination within the framework that was talked about in the previous panel about disparate impact laws and disparate treatment laws. Our legal frameworks take into account both disparate impact and disparate treatment although traditionally disparate impact is not traditionally a claim within the insurance realm. We define proxy discrimination really in the middle of disparate impact and disparate treatment – a subset of disparate impact. We can think of intentional proxy discrimination with insurers historically actively using race or actively using something like redlining to proxy intentionally for race. But that is not the problem we are seeking to address in this context. What we are worried about is unintentional proxy discrimination because of the use of certain algorithms. A couple of things to note from that chart is that proxy discrimination is conceptualized as a subset of disparate impact claims but also it shows why its incredibly important not to limit a definition of proxy discrimination to only intentional decisions. Algorithmic proxy discrimination is not intentional discrimination but will engender the very same problematic outcomes as direct intentional proxy discrimination. Additionally, our definition of proxy discrimination is in some ways distinct from broader disparate impact conceptualizations. For example, disparate impact law allows a defense for legitimate and acceptable business purposes. Since our definition of proxy discrimination assumes that the proxy trait is predictive, the current disparate impact framework may not address the harms in algorithmic proxy discrimination however neither would a disparate treatment framework – this is a new legal problem that arises uniquely out of the use of big data and algorithms.

Our thesis in the paper is that where the law removes the ability to consider a protected trait that is directly predictive of an outcome of interest, algorithmic proxy discrimination is inevitable and this is why this is such a thorny issue in the context of race because we want to have a society where we are not taking race directly into account and proxy discrimination effects may add that effect back into the system. This is notably true even when an insurer utilizing the technology has no intention of discriminating. It is an aspect of the technology that will occur unless corrected for. Prof. Prince stated that she understands that the second half of the day will focus on discussions of specific rating factors and this conversation is incredibly important but if proxy discrimination is not defined to include unintentional algorithmic discrimination then any of the predictive rating factors discussed this afternoon can easily be replaced by an algorithm with enough big data. Additionally, algorithms can be utilized for many different aspects of insurance from marketing to fraud detection to ratemaking. Thus, the problems of algorithmic proxy discrimination extend beyond just ratemaking.

As described by Ms. Foggan, there are many times where insurance laws remove the ability of insurers to use traits that are indeed predictive such as race and gender and other protected

traits in state insurance codes. We've decided as a society that those are not acceptable to use even though they are predictive of mortality even though they have some actuarial justification. In other contexts federally we have the Genetic Information Nondiscrimination Act (GINA) and the Affordable Care Act (ACA) that does the same thing in health insurance. This really pits the definition of social discrimination against unfair discrimination as was laid out in the last panel and the question is how do we treat this algorithmic proxy discrimination. Do we think of it more like social problematic discrimination or do we think of it more like unfair discrimination where as long as there is actuarial justification then it is ok. Where the law removes the ability to consider protected traits that are directly predictive, algorithmic proxy discrimination is inevitable.

So what? Why do we care if it is inevitable? There is a lot of conversation that has occurred today to this point. If its predictive of risk then shouldn't we allow insurers to use all sorts of variables as long as they are predictive of risk? Prof. Prince stated that she would argue no if that predictive power is actually the remanent of a predictive power of a protected trait. Our law and society has passed laws that prevent insurers from using certain protected traits because doing so is viewed as being unacceptable and unfair. There are other times where the law disallows insurers from using a predictive trait to encourage socially beneficial actions such as recording incidences of intimate partner violence. Proxy discrimination must be defined to acknowledge the inevitability that an algorithm when given enough big data will find a proxy variable to stand in for a trait that is predictive of the outcome of interest even if that trait is disallowed to be considered.

In our paper we lay out several possible solutions to the problems of proxy discrimination each with varying levels of effectiveness and some of which have been implemented in state insurance regulations to date. Given time constraints I wont go over them in much detail but I am happy to answer questions. What's important to note is that these solutions are difficult for individual insurance companies to implement on their own without legislation encouraging that. Preventing an algorithm from proxying for a protected trait may make it slightly less predictive depending on how you look at it which was part of the conversation between Dr. Powell and Mr. Birnbaum but this is just as true for removing the protected trait itself from consideration. Our social discrimination laws make insurance prediction less accurate and we do that because we don't think that is what society should do so if we then don't allow that predictive power to be proxied for it also may make that a little less efficient and that can be an ok thing because we have already decided that we shouldn't take into account race in underwriting. Because, for race and other protected traits we as a society have already determined that this is a necessary and acceptable tradeoff.

Prof. Prince stated that she would like to highlight ethical algorithms which is a movement in computer science and there is a lot of literature on this on all sorts of contexts including insurance and as shown earlier by Mr. Birnbaum controlling for protected traits in models does two things. It narrows the predictive power of a variable to its unique contributions so if you add a protected trait into the model the variable that is left that is proxying for race will only have the predictive power unique to it. Additionally, if the protected trait is not predictive of the outcome then the corrected variable will stay as powerful as it was before so this is how its not exactly the same as disparate impact because its not just that the variable has a connection to the protected trait but its taking some of its predictive power from that protected trait. As noted by Dr. Powell it is really important to test these as not all insurance models are going to have this problem if its tested for but we need to be able to have insurers actually do that to make sure that there is not socially unfair discrimination in our society.

Prof. Prince stated that that at the very minimum proxy discrimination must be defined to include unintentional algorithmic discrimination or else even the impact and success of our existing anti-discrimination laws are threatened. As such, the current draft definition in the NCOIL Model is insufficient to address the harms because it includes intentional substitutions of a neutral factor but does not address how algorithms will do that just by the nature of the fact that they are algorithms trying to predict the best that they can. Those arguing against inclusion of definitions of proxy discrimination in insurance argue that it may take away predictive power in insurance decisions. However, under our definition of proxy discrimination the actuarial value that the definition would control for comes directly from a protected trait. Without this an algorithm would theoretically be able to use any trait even if it is 100% predictive of race but entirely unpredictive of the outcome of interest once race is taken into account. We advocate for no more than for someone's race or other protected trait from playing any actuarial role in insurance decisions just as what is intended by many state anti discrimination laws. The increasing use of AI demands us to ensure that our existing legal framework address insurance issues of fairness in our systems. Prof. Prince thanked the Committee and stated she looks forward to questions.

Claire Howard, Senior VP, General Counsel & Corporate Secretary at the American Property Casualty Insurance Association (APCIA), thanked the Committee for the opportunity to speak and stated that APCIA represents over 1000 member companies who together provide 60% of the home, auto and business insurance and reinsurance in the U.S. APCIA understands the time is now to publicly recognize and address the profound problem with social racial and income quality that exists in our country. We also understand that substantive and durable solutions require the commitment and participation of the various sectors in America's economy including insurance and where necessary gov't action through legislation. We believe achieving substantive and durable solutions for the persistent problem of inequity requires certain things form all stakeholders in other words from the people, sectors and institutions affected.

Developing substantive and durable solutions requires debate, understanding, compromise and thoughtful public policymaking. Thoughtful policymaking requires the participation of stakeholders who are willing to identify the interest they hold in common who will think more broadly and creatively than they have historically which will provide objective support for their position and who will compromise to support public policy that fairly balances their divergent interests to avoid unintended consequences with a more detrimental affect on society as a whole. You need all of that to succeed and APCIA's members stand ready to engage with you in that way.

The specific question on this panel that APCIA has been asked to address is how to define proxy discrimination. You have APCIA's Nov. 5 letter on that subject in your pre-meeting materials in which we cite authority for the declarative statements included in that letter. I'll address certain points in the letter and I am happy to respond to questions after. I'll begin with the top line – NCOIL's staff efforts for defining proxy discrimination has significant merit and comports with well established case law and discrimination principles. APCIA looks forward to working with NCOIL on any refinements NCOIL chooses to make in that definition. My remarks this morning will explain why APCIA supports NCOIL's approach.

In the context of the business of insurance, statutory rating standards have for decades universally prohibited rates that are excessive, inadequate, or unfairly discriminatory as has been well described by others this morning. The term unfairly discriminatory is universally defined as treating policyholders with similar risk profiles differently. This statutory formulation is otherwise known as risk based pricing. Its purpose in large part is to balance policyholder interest in rates that fairly reflect the risk they present and the coverage they purchase on one

hand with the industry interests in solvency which requires price to match risk on the other hand. At the end of the day a solvent industry ensures competition and competition promotes availability and affordability of insurance products. Risk differentiation is at the heart of risk based pricing and state rating statutes across the country.

If we think about risk differentiation with policyholders interests in mind, APCIA's position is that the more factors that are considered the less impact any single factor has on pricing or underwriting outcomes. Thinking about risk differentiation from the insurer perspective, the more factors the more precise that the prediction of risk helping to ensure solvency in the aggregate. As insurers compete using their specific set of rating factors, policyholders have more choice. A definition of proxy discrimination must preserve the ability to differentiate among risks for the purpose of meeting policyholder expectations and ensuring a solvent industry. This is not to be understood as an argument for no change because its been that way for so long. Rather we urge policymakers to consider the history and role of state rating statutes and the unintended consequences of enacting an inconsistent definition for proxy discrimination will have on an essential element of the business of insurance namely risk differentiation and risk based pricing. The approach to defining proxy discrimination proposed by NCOIL staff addresses these concerns. There are two broad categories of discrimination claims and they are first international discrimination in which intent is the primary focus and second is disparate impact discrimination where intent plays no role at all.

A form of intentional discrimination is the legal theory known as disparate treatment which includes proxy discrimination. The similarity in name only to the unintentional form of discrimination called disparate impact can create confusion. In the insurance context, disparate treatment occurs when an insurer treats a policyholder less favorably than others because of the policyholders membership in a protected class. Proxy theory was adopted by the courts as an element of disparate treatment discrimination to recognize that a policy should not be allowed to use a technically neutral classification as a proxy for evading the prohibition against intentional discrimination. Because intent is a primary focus on disparate treatment cases when relying on proxy theory a plaintiff must demonstrate that the defendant was motivated by a discriminatory purpose in choosing a proxy about which the plaintiff complains.

As a form of intentional discrimination, disparate treatment challenges including those that rely on proxy theory ask one question – is there sufficient evidence, either direct or circumstantial, that defendant was motivated by discriminatory purposes in choosing the challenged proxy. If the answer is yes, then the challenged policy must be eliminated. Because defendant's intent is an essential element, plaintiff is entitled to equitable relief and attorney fees but also punitive and compensatory damages depending on the underlying facts of the case. It is very important to distinguish between intentional discrimination, its manifestation as disparate treatment and its analog in proxy discrimination which is a tool for a subset of intentional discrimination and separate that from disparate impact.

In contrast, disparate impact discrimination is inherently different form intentional or proxy discrimination. Disparate impact involves policies that are technically neutral like disparate treatment, but unlike disparate treatment they are not motived by discriminatory purpose although unintentional disparate impact discrimination involves a policy that has an adverse effect on a protected class that is not otherwise justified by a valid business interest. Federal courts applying disparate impact analysis ask a series of three questions. First, does the challenged policy have an adverse effect on a protected class. If the answer is yes then courts ask a second question – is there a valid interest served by the challenged policy. If the answer to that is yes then the final question is whether there is an alternative that serves the same valid

interest with less disparate impact and at less cost. If no such alternative exists, then the challenged policy stands and the claim fails. Because intent plays no role, directly or indirectly, in disparate impact claims courts may award equitable relief and attorney fees but not compensatory or punitive damages – a distinguishing element separating from intentional discrimination and disparate impact discrimination and separating it from proxy discrimination. While disparate impact has been used in federal housing law, no state has adopted it as an insurance standard. Moreover, it entails an entirely different analysis than proxy discrimination as NCOIL has implicitly recognized in its proposed definition. Efforts to conflate disparate impact and proxy discrimination which is an element of disparate treatment should be rejected.

In conclusion, NCOIL's approach to defining proxy discrimination prohibits choosing a technically neutral factor that singles out a protected class for the purpose of depriving a policyholder of an insurance related benefit. This definition allows the industry to continue to differentiate among risks as long as the choice of a risk factor is not based on membership in a protected class. To do otherwise would be to take proxy discrimination out of the category of intentional discrimination where it resides currently under the law and place it in the category of unintentional discrimination and in doing so applied to the business of insurance where it has never been applied before by any state legislature.

Said another way, application of proxy theory in the insurance context would conflict with current state law that requires risk differentiation to balance the interests of policyholders and insurers alike and would likely require an overhaul of the underlying statutory framework – namely the prohibition that rates are excessive, inadequate or unfairly discriminatory. The approach for defining proxy discrimination proposed by NCOIL staff is consistent with current law and therefore is an approach APCIA supports. While these remarks address the issue of proxy discrimination, APCIA believes consumers are best protected and they derive the most benefit through robust private market competition and which risk based pricing incorporating a multitude of relevant rating and underwriting factors ensures rates match risk. Thank you for your time and for a deliberative and thoughtful approach addressing these public policy concerns embedded in this critical issue.

The Honorable Nat Shapo, Former Director of the Illinois Department of Insurance, thanked the Committee for the opportunity to speak. Jumping right in, a lot of what he will say is in the paper he wrote which is in the pre-meeting materials. The two points that are most relevant from the paper are, with respect to proxy discrimination, he doesn't think its necessary to define the term. Most state laws now protect social classes and the language in those statutes is generally something to the effect that it prohibits discrimination based on or based upon or some variation of the protected characteristic. I think that such language properly understood is broad enough to sweep in proxy discrimination. I believe the term proxy and its dictionary definition and the way its usually used in the law encompasses an element of intent. If the use of a proxy is intended to sweep in a protected class then that should be seen as "based on" or "based upon" a protected class. Therefore, it can and should be seen as already prohibited under the law.

Also, I don't think we've seen evidence of a significant problem to date with proxy discrimination. Generally, I think policymaking usually reacts to established problems and without establishment of the problem I submit the possibility that it may not be necessary to pursue a proxy discrimination definition but that is obviously the Committee's prerogative and it should proceed as it deems bets. When talking about definitions of proxy discrimination, I think that in the case of actually defining the term the biggest focus should be that it is intentional discrimination – the intent to use an otherwise neutral factor as a proxy for a protected class. The language NCOIL should pursue should be a strict attempt and carefully worded so as to

avoid leakage into the concept of disparate impact. The dividing line I think is that intent is intent and effect is effect. They are different concepts and one should be able to draw a line between the two with careful wording. The difference between proxy discrimination defined by intent and disparate impact defined by effect is real and understandable and a well crafted definition could achieve that. I think the NCOIL staff definition accomplishes that well and I would commend that as an excellent starting point for discussion.

Moving away from that language, there is a concern that such a definition could lead to a slippery slope of a law going towards disparate impact. So, I think the policy choice that I'm getting at is proxy discrimination defined by intent or disparate impact defined by effect. This is a well put together panel that has sketched out different viewpoints on that and today's presentations will be very helpful in framing committee member's views on how to proceed. The CEJ and Prof. Prince gave very well argued presentations and they are essentially advocating for a disparate impact standard. They presented their positions very well and if you are in favor of a disparate impact standard then they have sketched out what that would be. Dir. Shapo stated that he argues against a disparate impact standard here and supports a true intent based proxy discrimination definition. Disparate impact is bad policy in the business of insurance and as referred to in his paper and the NAIC amicus brief to The Supreme Court of the United States (SCOTUS) which is probably the most well articulated written document he has seen that sketches out the principles of why disparate impact does not work well in the insurance context. The NAIC told SCOTUS "in insurance, discrimination is not necessarily a negative term so much as a descriptive one." That goes to Rep. Keiser's earlier point.

The NAIC said "for insurance, fair discrimination is not only permitted but necessary" – again echoing Rep. Keiser. "It promotes insurer solvency through appropriate risk classification and accurate pricing of insurance." That is a very nice and straightforward explanation. The NAIC also said "rationally based neutral risk selection criteria promote insurer solvency through appropriate risk classification and accurate pricing of insurance." That gets to the policy rationale behind the risk based pricing standard. Its good public policy because its good for the public because insurer solvency is in all policyholders interest. Setting those public policy parameters, NAIC then concluded that "the disparate impact approach overthrows state laws that allow insurers to use rationally based neutral underwriting guidelines." The NAIC then got back to policy reasons saying "of concern to state regulators is that improper underwriting can result in the following – an insurer can become insolvent or a potential insured could be improperly discriminated against." So, there are two major policy concerns there. One is solvency by having accurate pricing and the other is the fairness norm of people paying into the company based on their likelihood of taking out through a claim.

Dir. Shapo stated that he believes the NAIC is correct in both those public policy statements and the resulting law. That basically comes down to the idea that disparate impact is incompatible with basic insurance principles. In insurance you have one core standard of risk based pricing and that is actuarial justification and that applies to every rating factor. The exceptions to that rule are codified statutorily with enumerated exceptions such as race, religion or national origin. Those are specific factors that are exempted from the core standard. An insurer can manage risk this way and knows that it is supposed to use factors that follow cost based pricing. It follows this rule and follows the enumerated exceptions to that rule in the code. It's a manageable and rationale system. It is much more difficult to manage risk if you have a second sweeping factor on top of the risk based pricing standard and that's what disparate impact would be. Disparate impact would apply to every rating factor so you would have a cost based pricing standard on every rating factor and then a disparate impact standard on every rating factor and I think that's what the NAIC was concerned about when it wrote about the negative

consequences of disparate impact. An insurer cant manage risk that way. The insurance industry is about predictability. The current system promotes predictably with one standard and codified exceptions. A system where you have two standards at once would be destabilizing for the industry and the opposite of predictable.

Dir. Shapo then discussed a few points made in the earlier presentations which illustrate the divide for policymakers to make their decision. In Mr. Birnbaum's presentations on slide 24 there was a question why is it reasonable and necessary to have disparate impact defined as unfair discrimination in insurance and the answer was that in an era of big data systemic racism means that there are no facially neutral factors. I think that is well articulated but it also sets the dividing line between his position and my position. If you have literally no facially neutral factors, if that's your starting point for discussion, then you are looking at that proverbial slippery slope on disparate impact that you will have no clear standards and no understandable guidelines and every rating factor will be immediately presumptively suspect in that way. If insurers are expecting a challenge on every factor in that way because there are no facially neutral characteristics then in the end you are looking in the end at a qualitatively different industry with different standards and I don't think we've had evidence presented here of a problem in this industry of a system that's not working well and that is biased against protected classes. As a matter of public policy I think that is not preferred.

Dir. Shapo stated that he read Prof. Prince and Prof. Schwarcz's paper as a slightly different take instead of a totally equivalency between proxy discrimination and disparate impact and that instead proxy discrimination is a subset. On slide 4 of Prof. Prince's presentation defining algorithmic proxy discrimination: "Use of a facially-neutral trait in an algorithm that disproportionately harms a protected class; and Usefulness (predictive power) of the facially-neutral trait arises from its correlation with a legally-prohibited characteristic." I think that this is the crux of one of the main premises of the paper and is a poor theme and is a diving line between the two different approaches. To me I start from the premise that if a factor is predictive then the value comes from that predictiveness. It is going down a slippery slope to start questioning whether the predictive value comes from the protected class status. If a factor is predictive then it is predictive and that's the core rule. Insurers don't use factors because they correlate with a protected class – they don't care. Insurance is objective and insurers don't even know the protected class status of their customers. It is important to note the difference to what we have been watching on TV this year. The allegations we've seen in terms of systemic racism usually has to do with something like a policeman or a job interview or a doctor treating the person in front of them differently when they see the person's skin color. Insurers don't do this and cant do it as they don't know the protected class status of their customer and they don't care as their incentive is to price as accurately as possible so that they can have the most financially sound risk pool.

In my paper I quoted something from the credit scoring debate at the NAIC in 2001. The Chair of the NAIC market conduct committee asked proponents of a disparate impact standard for credit scoring – "why would insurers use credit scores if they did not work?" To me that is the crux of my position – insurers are using the factors they use because they work and work means they predict loss. A factor doesn't work if it predicts a protected class it works if it predicts loss. Sometimes a factor might correlate with a protected class but the predictive value of the factor comes from its predictive value not because the insurer is seeking to discriminate against a protected class.

I think there was an allusion in the MO DOI study which responded to a media report of surcharges based on a protected class and the MO DOI did a very careful study on that and

found that there was not a protected class surcharge and said "higher rates for urban areas seem to be entirely accounted for by higher payouts." Again, predictive value comes from predictive value not from protected class correlation. I again reference the key question from the NAIC debate – why would insurers use in that case credit scoring and in this case any factor that doesn't work. The MO study and all evidence such as Dr. Powell's indicate that insurers use factors because they work not because they correlate with a protected class. Thus, I support an intent standard for proxy discrimination and getting back to the bottom line here in reviewing the NCOIL staff definition it is a thoughtfully crafted draft and if you choose to produce a model law to codify a proxy discrimination standard this is the appropriate and worthy starting point. Dir. Shapo thanked the Committee for its time and consideration.

Paul Graham, Senior VP, Policy Development at the American Council of Life Insurers (ACLI), thanked the Committee for the opportunity to speak. ACLI represents 280 member companies that account for 94% of the assets in the life insurance industry. I note that a lot of what we have talked about this morning is the perspective from the P&C side of things so my remarks may sound a bit different for a number of reasons that we will get into. Mr. Graham began with some background before discussing proxy discrimination. It is important that as part of this life insurers recognize the past that we've had from a discrimination standpoint and we can go back to the 1800s and show that life insurance companies were blatantly discriminating against black Americans by either reducing the face amounts that were paid out as death benefits or denying commissions for policies sold to black Americans. Even in the 1940s 40% of companies were not selling policies to black Americans. Starting at around 1948 the civil rights movement prompted leading companies to adopt race-merged tables and it took all the way until the 1980s to get to the point that any and all race based policies have been eliminated. With a past like that we did end up settling suits that addressed those discriminatory policies in the early 2000s.

Needless to say that is not a great past when it comes to discrimination but it is important to now talk about today. Mr. Graham stated that in listening to the earlier presentations he was envious that they had a lot more information available to them on the P&C side of things because there is a lot more info collected regarding rates and prices. That is not the case on life insurance so ACLI had to purchase the 2018 Macro Monitor Household Survey and all of the info shared today is a result of ACLI analysis of those survey results. First of all the most important stat to show is that 56.8% of all U.S. households own life insurance, while 55.9% of black American households own life insurance. So, there is not really any evidence of from that standpoint that there is a difference whether you are a black or white American of having access to insurance products. Furthermore, the coverage ratio which is defined as the median in-force face amount divided by median income is nearly identical for black American households – 160% coverage vs. 162% coverage. That is an important statistic because as everybody knows as income goes up so do face amounts and so while there is some stats you can find that might lead you to believe that black Americans are not purchasing as much life insurance as white Americans its really a function of their income and not a function of availability and any kind of discriminatory practices.

One thing that is very noticeable is that black American households are more likely to own whole life insurance (22%) than white American households (19%). Where you find an interesting gap is actually the group insurance side of things where black American households are less likely to own group insurance (34%) than white American households (40%). That is an interesting fact because there is a later slide that shows that younger black Americans are less likely to own insurance than white Americans when they're young and its likely because they are not having access to group insurance but as I think most of us know group insurance doesn't have any medical underwriting and its not really a discriminatory pricing structure so everybody

that's within a group is getting the same insurance rate of coverage. I point this out because it cannot be a function of any kind of discrimination that the younger black American households don't have as much insurance.

Another thing to point out which is very interesting is that black American households have utilized the policy loan features at a much greater amount than white American households - 7% to 2%. The importance of that is that life insurance has given black American households access to low cost loans which they might not have in absence of owning a life insurance policy so the industry takes pride that the policy loan feature has allowed black American households access to cash that they might not otherwise have had. The last thing to point out in terms of where we are today is that black American households trust their life insurance agents in the event of their death. More than 80% agreed or strongly agreed with the statement that "I am confident that should I die my life insurance agent will act in the best interest of my beneficiaries." Only 70% of white Americans agreed or strongly agreed with that statement. That is showing that the interactions that black Americans are having with their insurance companies are in fact good interactions.

The next slide shows the age differences at which black Americans and white Americans own their life insurance. You can see that in early ages white Americans have much more prevalence of ownership but once you get to about age 50, its about equal and then in older ages actually black Americans are maintaining their policies right through their death which may not be the case for as many white Americans. That is important because life insurance is one of the best ways to provide inter-generational wealth transfer and black Americans are definitely taking advantage of that so that they can help the next generations with their own finances. Having said that, I think we can do be better as there are still some gaps and its not just gaps among black Americans. Less than 60% of households of any sort own life insurance and that sort of points to the fact that it is a voluntary market and people don't have to buy life insurance and that distinguishes us somewhat from P&C because there if you own a car you basically have to own car insurance and if you have a house with a mortgage you pretty much have to have home insurance but that is not the case with life insurance as it is something that is a voluntary purchase. We recognize that what we're really trying to do is to expand access to affordable financial security in underserved communities and that is the first principle of ACLI's economic empowerment and racial equity initiative.

The other principles that ACLI is following in that initiative is advancing diversity and inclusion within companies and on corporate boards; achieving economic empowerment through financial education; and expanding investments in underserved communities. So, life insurers are taking seriously the past and the present when it comes to racial inequities and doing what we can to do our part towards solving some of the longstanding problems. Lets talk a little bit about expanding access to affordable financial security in underserved communities. ACLI supports innovation and technologies that are part of the solution by driving expanded consumer access and consumer affordability in the middle market and underserved communities. At the same time, ACALI supports a regulatory framework that eliminates proxy discrimination in the delivery of life insurance to the consumer. Last but not least, ACLI supports removing unnecessary barriers that may impede the ability of people of color to become licensed by or employed with the insurance industry. As you might know, much of insurance today is still sold across the kitchen table so to speak and having more people of color in the profession of selling will in fact increase access to underserved communities.

The best way that we can think of to drive expanded consumer access in addition to making sure that people of color can become agents is by using accelerated underwriting programs.

The life insurance industry believes accelerated underwriting programs using algorithms, artificial intelligence and big data increases accessibility to financial products and can help close the gap between the amount of coverage people need and the amount of the coverage they have today. These programs can help do that by making accurate underwriting decisions faster and simpler and less evasively, which today's consumers demand. To that end we have to make sure that whatever we do regarding defining proxy discrimination and regulating it that we cant be discouraged from employing new tools like artificial intelligence as that would be a bit like the proverbial throwing the baby out with the bath water. It is really important that we keep that in mind and we've seen the direct impact of all of this in 2020 because of COVID we've had less ability for agents to sit across the kitchen table and make sales and while certain life insurance sales have suffered to some degree this year and part of that could be economically rather than the inability to contact people, life insurers have been able to continue their missions of helping peoples financial futures by using a "touchless" underwriting process that includes these underwriting algorithms, AI and big data.

Mr. Graham stated that, again, life insurance is quite a bit different than P&C insurance. Everything that life insurers are doing is a guarantee of long term financial planning and that long term financial protection is only available when we can provide a clear picture of peoples health and other factors that are relevant to mortality and morbidity. We get one chance to make a promise that can last 40 years. That is significantly different than the P&C brethren. Fairness in life insurance pricing also requires that both coverage amounts and premiums be based on sound mortality and morbidity expectations of each individual.

I note that both Prof. Prince and Mr. Birnbaum have suggested that the concept of proxy discrimination is comparable across different types of venues. We've got a proxy discrimination type of law on housing and also for employment law and I would suggest that there is a little bit of difference here because in that type of framework its not a risk of anything you are trying to determine. If there is discrimination in housing its not that you are trying to determine whether somebody is black or white and they are going to do something bad to your apartment – its a lot more driven than dislike of that trait of being black or being a person of color. Its not a function of risk. Discrimination in the life insurance and P&C side of things comes from an assessment of risk. So therefore when you think about the discrimination laws of insurance I would suggest that the discrimination laws are there so that insurance companies are not using race as proxy for risk assessment and that's the importance here. Society didn't say since we've decided that we are not going to discriminate against people of color directly that therefore that means that any risk associated with that particular trait should also be tuned out when doing underwriting. So we have to be very careful.

Mr. Graham stated that the most important thing he wanted to say today is that its very important we understand that underwriting has historically been based on factors correlated to mortality and morbidity rather than causative. We have heard a lot of stuff today about correlation – that is not new. Smoking, diabetes and hypertension don't cause deaths. Lung cancer and kidney failure and strokes do. Smoking, diabetes and hypertension are correlated with those diseases so we have to be careful when talking about correlation. At the same time I can show that diabetes and hypertension are correlated with race but that doesn't mean that insurers shouldn't be able to use that so we have to be careful to focus not on eliminating underwriting variables that are not causative because I think that would eliminate almost all underwriting variables.

ACLI has put together a team of doctors, lawyers, actuaries and data scientists to brainstorm ideas on a regulatory framework that keeps all the advantages of accelerated underwriting

programs while identifying and correcting potential misuse of the data. We are serious and want to make sure that happens. So far we have not found evidence that there is currently unfair discrimination or proxy discrimination in the delivery of life insurers' products to the consumer. Life insurers want to keep it that way and want to be transparent with our regulators as new technologies are introduced. One large hurdle in detecting proxy discrimination: Life Insurers do not collect racial information. As a result, it is difficult to get data to study and it makes it difficult to study unintentional discrimination. One thing that that we have determined is that eliminating specific underwriting variables is not likely effective in addressing proxy discrimination in underwriting algorithms. Mr. Graham thanked the Committee for its time and stated that he is happy to answer questions.

Sen. Breslin noted that some legislators had questions for the first panel of speakers that were not addressed due to timing issues so they will be addressed now. Rep. Edmond Jordan (LA) stated that he had a question for Dr. Powell and wanted to start with the premise of what is the purpose of the Committee. If it's just to prove that there is no unfair discrimination based on race then I think we pack it up and go home and complete our work. But if its to really get to the root causes of what's really going on then I think we have to have a different discussion. If it's just to prove that we want to control the narrative and outcome I think we have seen this story before. Rep. Jordan stated that he believes he heard Dir. Shapo state that disparate impact is bad policy. If he didn't say that he can clarify.

Dir. Shapo stated that yes his position is that disparate impact is cognizable in certain statutes that specifically evidence an intent and statutory language that encompasses disparate impact whereas the state unfair discrimination statutes don't have disparate impact language. Rep. Jordan stated he has an issue with that because the message sent to protected classes is that we know that it impacts you adversely but it's not intentional so just live with it. If it's a disparate impact we know that is an adverse impact but if you are telling me that no harm no foul since it is not intentional then I don't know necessarily where we go with that because to say that there is no evidence that the system is not working well I would contend that the system is working juts as it was intended to work and that's the problem. If we are going to look at the history of insurance, it was involved in the slave trade. Insurance gave plantation owners the right to insure African Americans as property so if we are going to ignore that and think that protected classes are going to think that this is an industry that has our best interests at heart, then we are fooling ourselves.

If we are doing this because of some response to the pandemic or response that we saw with Floyd and we're going to ignore the systemic issues that deal with systemic racism then I'm really just not sure what we're doing. It reminds me of when we talk about police misconduct in the first place. We have been complaining about that for years and now all of a sudden that people can see it, it becomes an issue and then it causes all of these companies to reevaluate what they are doing to have diversity to deal with insurance. I heard Dr. Powell state that if you are a good driver in a bad area you are going to pay higher rates. I think that ignores all of the history of African American soldiers who fought in WW2 who didn't have access to the GI bill and redlining and Jim Crow and white flight. There are a host of issues that we are not even touching and all of these issues have some underlying factor as it goes into these rates. If we are not going to set the table correctly to make sure that we are starting with the right narrative and right premise then it reminds me of the narrative that crack addiction is a crime and opioid addiction is a disease. We can justify whatever we want to justify along the way and if that's what we are doing that's fine. I appreciate everything talked about thus far but I haven't really heard any solutions to the problem and again, to admit that there might be disparate impact is to

me to admit that protected classes are going to be adversely affected but since we cant prove its intentional then the system works just great.

Sen. Breslin stated that this Committee cannot solve 250 years of wrongs. We are an insurance organization and trying to analyze and review the conduct of the insurance industry in particular and to see if there is racism and if there is to correct it. Sen. Breslin stated that he appreciates Rep. Jordan's comments and would welcome talking with him after the Committee.

Dir. Shapo stated that he appreciates Rep. Jordan's comments and brought up a lot of important issues. To be clear, I'm not saying that there is no place for trying to address these concerns. My argument, which is in my paper that discussed more issues than proxy discrimination, is that the system has mechanisms to try and address social unfairness. First and foremost would be the ability to prohibit or restrict rating factors that are found to be socially unfair and where the social unfairness is deemed by policymakers as outweighing the social fairness of actuarial justification. That is why race is expressly prohibited under the law despite the fact that it in the past was used as a predictive factor. It has been determined that the use of race is more socially unfair than the social fairness of its actuarial justification and the law prohibits it and that's based on the public policy reasons largely stated by Rep. Jordan. The system is always there for a policymaker to put a bill in if they think that in individual rating factor is excessively unfairly discriminatory in the way it falls on a protected class. There has been discussion in some submissions here and elsewhere about things like criminal history scores and other things that could lead to bad outcomes in that way. A disparate impact standard is not the only way to address social unfairness.

Rep. Jordan stated that he understands that and noted that he is not asking to solve 250 or 400 years of history but what he is saying is that if you are looking at credit scores and crime data and you are not looking at where the wealth gap initiated in the first place then you are ignoring the elephant in the room.

Mr. Birnbaum stated that he would like to reinforce Rep. Jordan's comments. The issue that we're looking at is what is the impact of systemic racism in society on insurance. The black lives matter movement and protest in wake of the Floyd murder was a recognition that systemic racism purveys all aspects of our society. The effort here should be to look at how does systemic racism invade insurance and what can be done to address systemic racism within the risk based framework. Rep. Jordan is eloquent in talking about how systemic racism impacts a variety of factors that in turn impact insurance availability and affordability for different communities of color. The industry's position now is that yes we'll address this as long as its limited to intentional proxy discrimination. That is just ridiculous and simply says we are not going to do anything about this problem because if you've already banned intentional discrimination and then say we will ban intentional proxy discrimination its one in the same thing. As Dir. Shapo stated, he already believes that regulators have the ability to stop intentional proxy discrimination. To reiterate, if you are serious about really examining systemic racism in insurance then you really have to look at what Asm. Cahill mentioned regarding passive unintentional discrimination that's a result of the legacy of discrimination over the years.