

**Center for Economic Justice  
Consumer Federation of America  
Demos: A Network for Ideas and Action  
National Association for the Advancement of Colored People (NAACP)  
National Consumer Law Center (on behalf of its low-income clients)  
National Council of La Raza  
National Fair Housing Alliance**

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Dr. Jesse Leary  
Deputy Assistant Director  
Division of Consumer Protection  
Bureau of Economics  
Federal Trade Commission  
600 Pennsylvania Avenue, NW  
Washington, DC 20580

RE: FACT Act Scores Study, Matter No. P044804

Dear Dr. Leary:

This letter responds to questions outlined in the FTC Federal Register Notice requesting public comment on the Methodology and Research Design for Conducting a Study of the Effects of Credit Scores and Credit-Based Insurance Scores on Availability and Affordability of Financial Products.

As you know, we vigorously supported inclusion of this study provision in the FACT Act legislation. We did so because we have concerns about the accuracy and fairness of the credit scoring systems commonly used today. The use of statistically driven scoring models have come to dominate so much of consumer and mortgage lending and increasingly are being used in other areas of consumer financial services. Yet fundamental questions remain about whether the scoring systems contain biases that disproportionately impact minorities and other groups protected by credit discrimination laws.

Regarding the issue of credit-based insurance scores specifically, it is vitally important that both the scope and the method not be swayed by the politics of trade association policy or confused by references to "actuarial standards of practice." We discuss this issue below.

We understand that that the FTC and FRB are developing a formal relationship with insurance regulators for the insurance analyses. And we know that insurers has virtually unlimited resources to “assist” the FTC and FRB. Consequently, we urge the FTC and FRB to work with experts identified by consumer organizations on a regular basis to test the claims and assertions made by insurers and credit score providers.

There does not seem to be any disagreement that primary research is necessary to achieve the purposes of these studies. This will necessitate the need for your agencies to obtain credit scores, information about the factors used to derive these scores, as well as the algorithms for these factors. A variety of methods may be needed to obtain this information, either directly from the score developers and users of scores or from regulatory agencies and other less direct sources.

Further, we believe that as regulators both agencies are capable and have sufficient authority to obtain the necessary source information for these studies because of the absence of independent studies and/or independent verification of claims made by users of credit scoring models or the credit scoring model vendors. Thus, the Section 215 provision provides your agencies with a unique and important avenue to help to fill this information gap.

Lastly, we feel the need to distinguish major product categories within the broad product categories listed in Section 215. For example, private passenger auto insurance and residential property insurance (homeowners, dwelling fire, rents, etc.) should be separately studied, as well as various forms of mortgage credit (prime, sub-prime home purchase, refinance and home equity loans). Likewise should be studied the ECOA (Equal Credit Opportunity Act) protected classes of race, color, religion, national origin, marital status, and age.

Our responses to the questions below which were outlined in the Federal Register Notice, address the approach which we believe is critical for achieving the objectives of the legislative mandate.

**1. How should the effects of credit scores and credit based insurance scores on the price and availability of mortgages, auto loans, credit cards, other products, and property and casualty insurance be studied? What is a reasonable methodology for measuring the price and availability of mortgages, auto loans, credit cards, and other credit products, and property and casualty insurance, and the impact of credit scores and credit-based insurance scores on those prices and availability?**

We suggest the following approach to the Section 215 studies:

- ? Step 1: Identify how credit scoring is used for various credit and insurance products.
- ? Step 2: Determine whether credit scores for protected ECOA classes are significantly different from non-protected classes, resulting in disparate impacts for various products.
- ? Step 3: Where disparate impact exists, perform more detailed analyses to identify:

- A. The factors or components of the credit score system that cause or materially contribute to the disparate impact,
- B. The relationship of credit scores and credit score factors to market outcomes,
- C. The business necessity justifications for such outcomes, and
- D. Alternative systems, including alternative algorithms, that would lessen or eliminate the disparate impact.

We suggest that a uniform approach can be used for Steps 1 and 2, while product-specific approaches will be necessary for Step 3. There is also a need to distinguish major product categories within the broad product categories listed in Section 215. For example, private passenger auto insurance and residential property insurance (homeowners, dwelling fire, rents, etc.) should be separately studied, as well as various form of mortgage credit (prime and subprime home purchase, refinance and home equity loans).

It is important, particularly for insurance product analyses, that credit scores be defined broadly as any use by insurers of consumer credit information for underwriting, tier placement, rating or conditioning payment plan eligibility. A useful definition of a credit score for insurance is a number or rating that is derived from an algorithm, computer application, model, or other process that is based in whole or in part on credit information for the purposes of underwriting, tier placement, rating or payment plan eligibility. Underwriting typically refers to the decision by the insurer to offer a policy to a consumer, including the terms of coverage. Rating typically refers to the determination of a specific consumer's premium based on characteristics of the consumer, vehicle or property. Rating occurs after a consumer has been underwritten into a particular market or rating tier. Historically, there were three markets or rating tiers – preferred (with the lowest rates and most stringent underwriting), standard (with slightly higher rates and less stringent underwriting) and non-standard (with significantly higher rates and the least stringent underwriting guidelines). Each market or rating tier has its own base rate – the starting point for a premium calculation. With the advent of credit scoring, most insurers now have a larger number of rating tiers – dozens of rating tiers and, in at least one case, over 100 rating tiers. Consequently, tier placement has blurred the line between underwriting and rating as some of the factors historically used for rating are now part of tier placement eligibility. Finally, insurers use consumer credit information for purposes other than the decision to offer coverage and the price of that coverage. The terms of coverage, including required deductibles and types of coverage available, and payment plan options are often conditioned on insurance scores.

**2. An effect can often only be measured relative to a counterfactual. To determine the effects of credit scores on the price and availability of credit products, what is a reasonable counterfactual to the current use of credit scores? To determine the effects of credit-based insurance scores on the price and availability of property and casualty insurance, what is a reasonable counterfactual to the current use of credit-based insurance scores?**

In discrimination studies, the counterfactual is, as is partially outlined here, how would protected class members be treated if they had similar treatment to non-protected class members. The first order counterfactual then, is simply what would happen if we gave protected class members credit scores of non-protected members (simply the difference in their average credit scores). This gives the most extreme answer, proclaiming all the differences as being driven by discrimination. The second order, would be to compare the credit scores as various factors in the credit score algorithm are removed from the model, starting with those factors that have the greatest correlation with protected class status. Then the burden at each stage would be for the credit score model to justify why a particular factor is necessary for a business purpose, that is: how much additional information does a discriminating factor contribute to the scores accuracy relative to how much is it contributing to discriminating against protected classes?

In addition, where it is shown that the credit score system classifies or treats protected class members less favorably than non-protected class members (the benchmark or counterfactual), statistical disparate impact is established. The extent to which that impact is practically significant depends on the extent of the harm experienced by members of a protected class whose scores are disproportionately lower than non-protected class members. Do disproportionately lower credit scores result in higher rejection rates for credit for protected class members compared to non-protected class members? Are they required to pay higher interest rates or fees to obtain credit compared to non-protected class members? Are they subjected to more rigorous scrutiny of their credit qualifications, such as manual underwriting review, to obtain credit compared to non-protected class members?

For insurance, the counterfactual is simpler – how the consumer would be treated in the absence of insurers’ use of consumer credit information. Although some insurers have tried to develop underwriting systems that obscure the specific role of insurance scores in the insurers’ underwriting or tier placement decision, within the analysis of insurance products, the treatment of consumers in the absence of credit scores is straightforward because insurance scores are one of a number of risk classification factors used by insurers. Insurers readily admit that credit scoring is revenue neutral, meaning that any rate reduction for one consumer because of an insurance score must be offset with a rate increase for other consumers. (See Birny Birnbaum’s testimony in Colorado at the Center for Economic Justice website, [www.cej-online.org](http://www.cej-online.org) for an explanation of how insurers raise base rates to accommodate credit score discounts for some consumers.)

**3. Paragraph (a)(2) of Section 215 requires a study of the statistical relationship, utilizing a multivariate analysis that controls for prohibited factors under the (ECOA) and other known risk factors between credit scores and credit-based insurance scores and the quantifiable risks and actual losses experienced by businesses.” (The ECOA “prohibited factors” are race, color, religion, national origin, sex, marital status, and age.) What is the appropriate multivariate analysis technique for studying this relationship? What data would be required to undertake such an analysis? What data are available to undertake such an analysis?**

Where disparate impact exists, the FTC and the Federal Reserve Board should perform more detailed analyses to identify the relationship of credit scores and credit score factors to market outcomes and to identify alternatives that might lessen or eliminate the disparate impact.

After determining whether or not disparate impact exists, researchers would pursue the multivariate analyses necessary to identify the causal relationship, if any, of credit score factors or components of the scoring model to the disparate impact and the importance of those factors or components to predicting market outcomes e.g., foreclosure, loan default, late payments, insurance claims, and the impact, if any, of those outcomes on the user's losses and profit margins. This will help to identify the factors in credit scores that lead to disparate impact and to identify alternatives that lessen or eliminate disparate impact.

Analysis will likely vary among the products being studied. We have previously provided suggestions for the analysis of credit scores in insurance. We will be providing specific proposals for other product lines also. For lending, we call your attention to "Credit Scoring and the Fair Lending Issue of Disparate Impact" in *Credit Scoring for Risk Managers: the handbook for Lenders* edited by Elizabeth Mays. The authors explain how they attempted to address disparate impact by developing credit scoring models that specifically included protected class status as a control variable during the model development.

The analysis of insurance products has a specific challenge – the absence of insurance data of certain consumer characteristics at a policyholder level. While insurers routinely collect information on insureds' age, sex, marital status and geographic location, insurers do not collect data on race, religion, income or national origin. Ideally, FTC and FRB analysts would obtain the individual consumer characteristics necessary for the disparate impact analysis from another source. We discuss possible sources below. In the event that the individual data for race and other prohibited class characteristics are not available, a proxy for race and income, for example, must be used. The most straightforward proxy is geographic location – where the socio-economic characteristics of a census block where the policyholder resides are assigned to the policyholder for the analysis. The analysis should use the smallest available geographic area possible – which means starting with a census block – and using larger geographic areas – census tract, ZIP Code – as required by the number of data records (policyholders) and loss data.

The FTC and FRB analysts should be wary of arguments put forth by insurers about "actuarially-sound" analyses and "standards of actuarial practice." First, these standards have been and are developed by organizations whose membership consists overwhelmingly of actuaries who work directly or indirectly for insurers. Consequently, the actuarial standards tend to provide great flexibility and great deference to actuary's judgment and the standards also tend to codify industry practices. Second, the types of analyses required of the FTC and FRB are not actuarial in nature. Rather, the analyses are econometric.

The insurance analysis must start with data provided by insurers. Those data are individual policyholder records for vehicles insured and properties insured. The data request of, and provided by, insurers should include all underwriting, tier placement and rating characteristics used by the insurer. The data must also include a street address to enable the FTC and FRB to use the geographic proxy for certain socio-economic characteristics. The insurers should also provide the raw insurance score generated for the consumer and the insurance score category

assigned to the consumer for underwriting, tier placement or rating. In some cases, an insurer will use only one of these two, but in most cases, an insurer generates an insurance score and then, based on that score, assigns a consumer a credit score category for use in the underwriting, tier placement or rating process. The data should also include claims data. The insurer should provide paid losses by type of claim as well as loss reserves. FTC and FRB analysts should be wary of using incurred claims, which represent claims paid plus insurers' reserves for claims. By using policyholder data from, say, 2001, the claim experience will have matured such that paid claims should equal incurred claims, particularly for property coverages.

The data provided should be for an entire calendar/accident year or years. This is necessary to enable FTC and FRB researchers to ensure that the data provided by insurers is complete and correct. The calendar year data can be reconciled to the state pages in the statutory annual statement.

The insurance industry may offer to provide the data used by EPIC Consulting in the study EPIC did on behalf of insurers in 2003. This is undesirable for at least two major reasons. First, these data cannot be checked for completeness or accuracy or intentional bias by insurers. Second, the data do not contain critical data elements essential for the FTC/FRB analysis.

At this point, there are two general approaches available to the FTC and FRB. One approach is to rely exclusively on the insurers' data for analysis. The problem with this approach is that insurers' use different scoring models and use insurance scores in different ways and intensity. The credit scores would have to be normalized to allow comparison across insurers. One way to normalize the credit data is to translate the credit score into a percentile of the population.

The second approach is to take the data provided by the insurers, pull out the personally identifiable information for each data record and send those data to one of the major credit reporting agencies for the CRA to append a credit score. This is the approach used in the University of Texas Study and the approach being used in the current study by the Texas Department of Insurance. The advantages of this approach include a single credit scoring model for all consumers and the ability to append all credit characteristics to the data record. In the University of Texas study, the CRA not only provided the credit score, but also provided over 450 credit characteristics for each consumer record. The availability of the credit characteristics – the values of credit scoring model factors – will greatly facilitate the required analysis of FTC and FRB of the credit score model factors that most contribute to disparate impact. The disadvantage of this approach is that only one credit scoring model will be evaluated and the CRA is in a position to affect the outcome of the study with intentional or unintentional errors. This is a concern because the major CRAs are also in the business of developing credit scoring models.

The multivariate analysis for insurance scores must not use loss ratio as the dependent variable. (See Birny Birnbaum's discussion of the University of Texas credit scoring study at [www.cej-online.org](http://www.cej-online.org), for a detailed discussion of the problems. Rather, the analysis should use claim frequency, claim severity and/or pure premium (total losses divided by exposures). The independent variables should be all the underwriting, tier placement and rating factors in addition to the socio-economic proxy factors. The insurance analysis must also be done by major

coverage within a line of insurance. For example , separate models should be specified with personal auto insurance for bodily injury liability, property damage liability, medical payments and other first party medical, collision, comprehensive and uninsured motorists. For residential property, separate models should be specified not only for homeowners, dwelling fire, mobile homes, tenants and condo, but for separate policy forms within each line or sub line of insurance. Since insurance is regulated at the state level, state should also be included as an independent variable.

#### **4. What is an appropriate methodology to determine whether use of credit scores or credit based insurance scores results in “negative or differential treatment” of ECOA-protected classes?**

The basic approach in this step can be consistent across all products studied:

- ? Have the credit reporting bureaus generate consumers’ scores for various products;
- ? Match the consumers’ scores to socio-economic data.

Based upon the research used to identify how credit scoring is used for various credit and insurance products, identify the major credit scoring models used for various products. For example, in insurance, this could include auto and homeowners pricing models from Fair, Isaac, ChoicePoint, and major lenders and insurers who have developed a model in-house. The credit reporting agencies are able to provide a list of consumers, associated scores, geographic location, gender, age, and other relevant characteristics.

The ideal result is a list of consumers and their scores that can be matched to additional socio-economic data. There are a few possibilities for this matching, but some geocoding of the consumers' score is necessary to evaluate variation in outcomes by geographic area due to variation in economic conditions. One idea for matching consumer scores to racial characteristics is to use social security numbers to match racial information. Use of Social Security records for statistical or research purposes appears to be permissible under both the Privacy Act and Social Security regulations at 20 C.F.R. § 401.165.

It is our strong preference that actual race and other protected class data be used for the study to get the most accurate results. We posit that proxies are to be used only if all reasonable efforts have been exhausted, i.e. only if individual data is not obtainable.

The goal of this phase is to identify where the use of consumer credit information, in the form of credit scores, produces a disparate impact on various ECOA classes of consumers. Researchers should be able to develop conclusions about disparate impacts by combining any results found while determining whether disparate impact exists that show variation in credit scores by key consumer characteristics that represent protected classes with the understanding of scores that are used in determining how credit scores are used.

The insurance analysis poses a specific problem – if the analysis relies solely on policies issued, then the data do not include insurer denials of coverage or insurer offers so unfavorable that the

consumer could not accept the offer. Unlike, for example, the home mortgage market where data on all applications is readily available, data on all applications – as opposed to applications leading to policy issuance – are not readily available for a historical period. Insurers do not retain application data for very long if the application does not lead to a policy issuance.

Despite insurer practices, it remains imperative to evaluate all applications to fairly evaluate disparate impact. Evaluating only applications that lead to a policy issuance is a biased sample of applications. Consequently, the analysis of insurance disparate impact must attempt to obtain all application data from insurers for the limited time that insurers retain those data or direct insurers to collect and retain those data on a going forward basis and provide those data to the FTC and FRB after, say, 6 months of data have been collected.

The data for an insurance disparate impact analysis should include the consumer's street address (for identifying the geographic -based proxies for race and income), credit score, other rating, tier placement and underwriting characteristics and the characteristics of the policy offered to the consumer, including a total denial of coverage, rating tier, types of coverage (e.g., deductible, replacement cost coverage) and payment plan.

The analysis for disparate impact should also be multivariate to ensure that unfavorable treatment of the consumer (e.g. higher rates, less favorable coverage), if present, can be attributed to specific factors and not others. For example, youthful drivers are typically charged much more than older drivers. If minorities are a higher percentage of youthful drivers in the data, a univariate analysis would incorrectly show disparate impact on minorities, while a multivariate analysis would correctly show that youthful drivers were charged more. This is relevant if the dependent variable is insurance outcome – such as premium offered or coverage restriction.

If the dependent variable is credit score, fewer independent variables are necessary to evaluate whether credit scores have a disparate impact on protected classes.

## **5. What is an appropriate methodology to determine whether the use of specific factors credit scores or credit-based insurance scores results in “negative or differential treatment” of ECOA-protected classes?**

First it is necessary to determine what specific factors are used in determining credit scores or credit-based insurance scores. Should the agencies need to rely on the allocation of racial characteristics from small census areas across all product lines, it would be important to then develop a second level of samples (sub-samples) within the products where individual matching can be done or has been done as a “sensitivity test” for the geographic matching. Such samples are likely to have to be developed for individual products in order to conduct a multivariate analysis. Moreover, once race or ethnicity has been established for a credit file for one loan product, the data can be used for testing other loan products in that credit file.

For automobile loans, we note that in the several major lawsuits against automobile finance companies, the records in 14 states provided racial/ethnic data for driver's licenses and driver's



licenses were used to make matches in other states as well. One could then take a sub-sample of credit data for individuals from these lawsuits where the data are matched by both individual drivers' license records and by the small geographic areas (census blocks). One could engage in a good "sensitivity analysis" of the two methods by comparing outcomes for the sample that contains both sets of matching data.

Similarly, one can explore the possibility of individual match for mortgage loans from the Home Mortgage Disclosure Act (HMDA) data. One option is to secure a sample of credit bureau reports with credit scores from the three major credit reporting agencies (Trans Union, Experian, and Equifax). Duplicate reports could be either eliminated or assigned a special tracking number (not a social security number that would be recorded in the database) so that comparisons could be made of data from the different reporting agencies. In order to protect individual identities, addresses could be coded into census tract or other small geographic census tracts, but areas large enough to protect individual identities. Then, mortgage loans could be identified from the credit report (along with the lender and the account number of the loan). A sample of the mortgage loans could be selected to include different types of lenders and to include subprime lenders as well as prime, FHA, and other lenders using HMDA reporting, perhaps, to define types of lenders.

Two options might be explored at this point, one might simply try to match the loans with HMDA data from that lender (using the loan dates provided to the regulators in the HMDA reporting and sometime relying on the loan number used as a sequence number in the HMDA reporting being the same as the loan number used later in reporting to the credit bureaus on the status of the loan). On the other hand, the lender (to the extent that they can be identified through credit bureau data) could be contacted and asked to provide HMDA reporting data for the loan. These requests might be made through the agencies with regulatory power over these lenders or through HUD for agencies reporting the data to HUD, but not otherwise subject to Federal regulation. If the HMDA data could be secured through such a route and match to credit bureau data and scores, then race and income used to secure loans could be matched to credit bureau data. There may also be some value in using credit inquiries by mortgage lenders for individuals within sampled census tracts to seek matches with HMDA data for that lender in that reporting period for loans that were denied or otherwise not made.

Another option that might be used include using a similar approach to the Boston Federal Reserve Banks study on mortgage lending discrimination where the agencies send questionnaires to lenders asking that they match credit scores to the loan applications on the HMDA LAR. Still another would be to use survey techniques to contact individual and seek protected class data after explaining the purpose of the study and the confidentiality protections built into the study.

Additionally, some efforts have been made in the litigation context to use vital statistics to obtain racial and ethnic data from birth records.

For insurance, see discussion in response to question 4. At least two studies to date have appended individual credit characteristics – the factors used in credit scoring models – to policyholder data. With such a data set, the analysis of which credit score factors contribute most to disparate impact of protected classes is straightforward. It is the same type of analysis

lenders and modelers use to identify the factors most predictive of desired outcomes (e.g., no default, no insurance losses) with the exception that the dependent variable would be the protected class characteristic.

This analysis also requires identification of the factors used in credit scoring models. Credit scoring models for insurance are filed in most states and are public information in Virginia and Texas. FTC/FRB analysts can obtain these models to identify the factors used in credit scoring models to cross reference with the factors most associated with disparate impact discovered in the analysis described in the preceding paragraph.

**6. What is an appropriate methodology to determine whether there are factors that are not considered by credit based insurance scores that result in “negative or differential treatment” of ECOA protected classes?**

Include applicant’s qualifications or proof of payment for other expenses including rent or utilities in order to prove that other financial commitments are not aligned with an individual’s credit based insurance scores. Again, it is necessary to review each protected class separately in order to determine unconsidered factors.

For insurance, this analysis is essentially the same as described in response to question 5.

**7. In order to address paragraphs (a)(2) and (a)(3) of Section 215, data are needed on the geography, income, ethnicity, race color, religion, national origin, age, sex, marital status, or creed of borrowers, potential borrowers, insurance customers, or potential insurance customers. Are these data available and if so, where?**

Certain of this data are available through the Social Security Administration. It is also available from some of the state Department of Motor Vehicles, Department of Vital Statistics, and HMDA data. In addition, data on many of these items can be obtained directly from industry sources.

As mentioned above, it is our strong preference that actual race and other protected class data be used for the study to get the most accurate results. We posit that proxies are to be used only if all reasonable efforts have been exhausted, i.e. only if individual data is not obtainable.

For Asians and some Hispanic groups, race or ethnicity might be assigned through the proxy of name identification. This may be limited to certain groups, and to individuals who have maintained names with identifiable ancestries.

Since 1996, the Internal Revenue Service (IRS) has issued 6.9 million ITINs, nine -digit numbers formatted just like Social Security Numbers (SSNs), to certain immigrants who are not eligible for a SSN. While the ITIN is issued mainly for tax reporting purposes, ITINs can also be used to open bank accounts and establish a credit history. Some credit reporting agencies process and attribute credit information for consumers who have ITINs in lieu of SSNs. However, not all

credit reporting agencies treat immigrant consumers with ITINs equally, which can lead to significant discrepancies in information reported and in FICO scores. Therefore, the FTC should determine whether the use of ITINs may affect the ability of a creditor to obtain an accurate credit report and of an immigrant to obtain credit at terms that are as favorable as possible. The IRS National Taxpayer Advocate provides a breakdown of ITIN users by national origin in their Annual Report to Congress.

For insurance, the use of geographic proxies, as described in response to question 3 is reasonable.

Thank you for your consideration.

cc: Bryan Greene, Director, Office of Policy, FHEO