

May 28, 2012

FEDERAL DEPOSIT INSURANCE CORPORATION
Robert E. Feldman, Executive Secretary
Attention: Comments, Federal Deposit Insurance Corporation
550 17th Street, NW.
Washington, DC 20429

Sent Via E-mail to: Comments@FDIC.gov

**12 CFR Part 327
RIN 3064-AD92
Assessments, Large Bank Pricing Definitions Revisions
Notice of Proposed Rulemaking**

On March 27, 2012, in Vol. 77, No. 59 of the *Federal Register*, the Federal Deposit Insurance Corporation (FDIC) proposed to amend its regulations to revise some of the definitions used to determine assessment rates for large and highly complex insured depository institutions. ***Fair Isaac Corporation (FICO)*** respectfully submits the attached comments in response to the FDIC's request for comments on this Proposed Regulation.

About FICO

FICO is a leading provider of analytics and decision management technology. The company offers a wide range of market leading products and services including the FICO[®] score that was first introduced in 1989. With over 10 billion FICO[®] Scores used annually worldwide to empower lenders to make credit decisions, the FICO Score has become the standard measure of credit risk. FICO Scores are used today in more than 20 countries on five continents, by all of the top 50 U.S. financial institutions, and by both the 25 largest U.S. credit card issuers and auto lenders. The latest FICO Score version, the FICO[®] 8 Score, has already been adopted by more than 7,600 lenders.

FICO Comment

The notice of proposed rulemaking on "Assessments, Large Bank Pricing" describes 'Requirements for PD estimation' on pages 78-82. Page 80 describes the calculation of empirical (observed) default rates for defined score bins; the empirical default rate is then ascribed to the midpoint of the corresponding score bin. For other individual score values (not equal to a score bin midpoint), the rule provides for assigning estimated default rates by linear interpolation between the empirical default rates as follows:

When the number of score bands is less than the number of credit scores represented in the population, an observed default rate for some scores will not be

available. In that case, institutions must estimate the default rate for a particular score using a linear interpolation between adjacent, observed default rates, where the observed default rate is assumed to correspond with the score at the midpoint of the range for the band. For example, if one score band ranges from 621 to 625 and has an observed default rate of 4 percent, while the next lowest band ranges from 616 to 620 and has an observed default rate of 6 percent, a 620 score must be assigned a default rate of 5.2 percent, calculated as

$$(.04-.06)/(623-618) \times (620-618) + .06 = .052$$

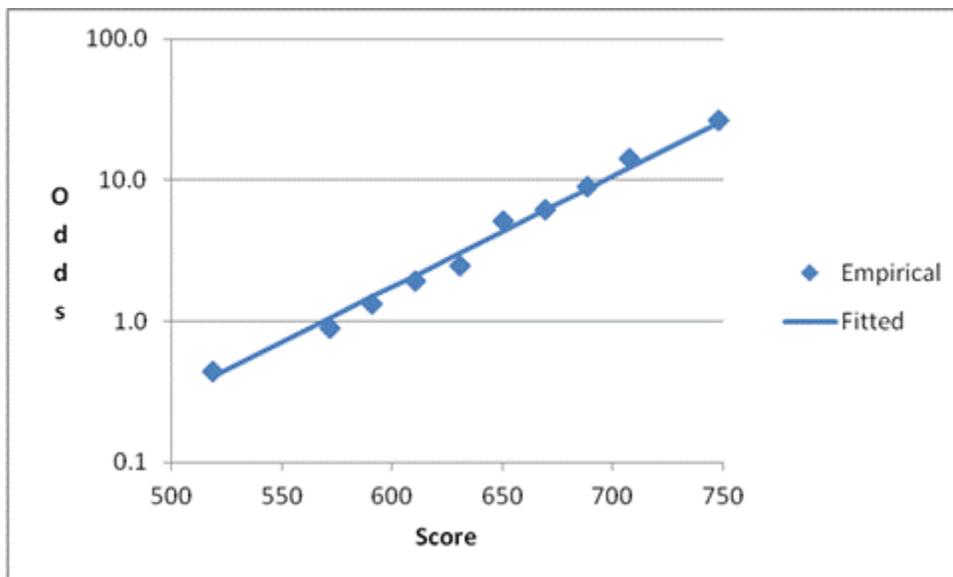
We propose that an alternative method of assigning default rates to individual score values be permitted. Namely, a least-squares linear regression (or other generally accepted statistical methodology) can be used to calculate an estimate of the overall relationship between score and default rate – covering all score ranges at once.

This concept is easier to depict graphically by referring to the notion of Default Odds for a given group (e.g., accounts within a given score bin). Default rate (DR) and Odds are related to each other by the formula:

$$\text{Odds} = [1 - \text{DR}] / \text{DR}$$

Odds represents the number of non-defaulters, divided by the number of defaulters, for the score range of interest.

Here is an example of the empirical odds by FICO score observed for a test bankcard population recently studied.



The relationship between $\log(\text{empirical odds})$ and score is very close to linear for the FICO score.

Using least-squares linear regression (or a similar generally accepted statistical technique), we can calculate a formula for the best fit line for this relationship - which is represented by the “Fitted” odds line in the graph. From this formula, the estimated Odds (or Default rate) at any given cutoff score can be quoted – i.e., without regard to particular score bins.

Estimating default rates for individual score values based on the overall relationship between score and default rate is preferred over the linear interpolation method (described in the current proposed rule) for several reasons:

- The results of the linear interpolation calculation will be quite sensitive to how the score bins are chosen. On the other hand, estimates based on regression techniques are much less sensitive to binning choices, and are therefore more analytically sound.
- Fitted statistics provide a more reliable estimate of future default rates at a given score, than do empirical statistics. Fitted statistics will yield more accurate score range quotes for a given PD range.

Respectfully submitted,

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FICO