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Harvey Stein*, 731 Lexington Ave, New York, NY 10022. *Model Molding for Exposure Computations.*

Exposure calculations such as expected exposures (EEs) and potential future exposures (PFEs) are a fundamental part of credit risk modeling. They are used for sizing risks and drive regulatory capital requirements. The difficulty of computing exposures coupled with the similarity of exposure calculations to credit valuation adjustment (CVA) calculations has led industry participants to compute exposures using CVA infrastructure, which yields risk neutral exposures instead of real world exposures. This is with the blessing of the regulators.

Here we show that risk neutral exposures can be gamed; risk neutral exposures can be set to any desired level. We also show that commonly used risk neutral measures can yield differences in exposures of a factor of 3 or more.

We then show three ways to make use of the CVA infrastructure for computing real world exposures. We show how a measure change can be leveraged for the computation. Commonly, however, such a measure change does not exist. In this case, we show how a pseudo-measure change can be used, and how to combine models so as to synthesize the needed change of measure. (Received December 18, 2014)