New research on the valuation of over-the counter derivatives from the Rotman School of Management

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By some measures the over-the-counter derivatives business is the largest business in the world with over $600 trillion in transactions outstanding. This business plays a significant role in the profitability of global banking institutions.

Before 2007, banks agreed on the value of most of these transactions, but since the financial crisis of 2007-09 there has been growing uncertainty about derivative values. This centers on the question of whether or not to make what is known as a "funding value adjustment" (FVA). This is an adjustment to the price of a derivative designed to reflect the bank's funding cost. It has the potential to misstate profits from derivatives trading by a huge amount.

In a new study, two finance professors at the University of Toronto's Rotman School of Management say that there is a difference between the way derivatives are valued for trading purposes and the way they are valued by accountants for reporting purposes. It is this difference that is at the heart of the FVA debate. The way derivatives are valued for trading purposes reflects the bank's return on capital performance measure. But for reporting purposes, the "fair value" price of a derivative is calculated in such a way that it is consistent with the prices of other similar derivatives that trade actively in the market.

Prof. John Hull, who holds the Maple Financial Group Chair in

Derivatives and Risk Management, and Prof. Alan White, who holds the Peter L. Mitchelson/SIT Investment Associates Foundation Chair in Investment Strategy, argue that banks have a number of choices. One alternative is to use two valuations, one for internal purposes and one for external reporting purposes. The performance of the derivatives desk as measured by return on capital is then liable to be out of line with the reported performance. Another alternative is to change the return on capital performance measure so that it agrees with fair value accounting. In the opinion of study's authors, the best alternative is to use the trader's model to calculate breakeven trading prices and the accountant's model for marking to market and hedging.

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