THE UNIVERSITY OF CHICAGO | DEPARTMENT OF STATISTICS

# MASTER'S THESIS PRESENTATION

ZHUOYING HUANG
Department of Statistics
The University of Chicago

## Mark to Market Value at Risk

MONDAY, October 31, 2022, at 11:00 AM
Zoom Meeting, 5747 S. Ellis Avenue

## ABSTRACT

In modern financial markets, value at risk (VaR) has been a universally accepted risk measurement mainly due to its easy interpretability. While the underestimation of risk and incoherence has drawn increasing critics for VaR, especially after the 2007-2008 financial crisis. Among various candidates, we focus on a newly proposed measure called mark to market value at risk (MMVaR) considering multiple account settlements. We show the superiority of MMVaR through simulation examples and real-world data. It turns out that MMVaR, as a direct generalization of VaR, not only maintains its easily interpretable feature, but also has better estimation performance. Particularly, it provides evidence for Basel III's 23% increase in the minimum capital adequacy ratio.