



THE UNIVERSITY OF
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Department of Statistics

MASTER'S THESIS PRESENTATION

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**Managing Risk in Structured Credit Products in
Emerging Markets**

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ABSTRACT

During the 2007-2008 financial crisis, structured credit products (e.g. Collateralized Debt Obligation (CDO)) backed by home loan mortgages experienced substantial loss. Investment banks and insurance companies (e.g. AIG) that sold protection contracts (e.g. CDS) on such products lost billions of dollars. In this paper, we discuss the then market standard KMV model to estimate default intensities of each loan and Copula models to simulate correlated default times. Then we analyze one Collateralized Loan Obligation (CLOs) product issued by Bank of China in 2012 and discuss choice of risk measures (VaR vs. Expected Shortfall) and embedded risks. Finally, we explore new models attempting to price and measure risks more precisely.

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