

# DISSERTATION PROPOSAL

Maxime Roy

## Essays on the Securitization of Student Loans and the Financial Crisis of 2007-2009

Thursday, April 30, 2015

3:00 pm

227 GSIA

In the first essay, titled “Near-Arbitrage among Securities Backed by Government Guaranteed Loans”, I document the presence of near-arbitrage opportunities in the student loan asset backed securities (SLABS) market during the financial crisis of 2007-2009. I construct near-arbitrage lower bounds on the price of SLABS collateralized by government guaranteed loans. Once the price of a SLABS is below its near-arbitrage lower bound, an arbitrageur that buys a SLABS, holds it to maturity and finances the purchase by frictionlessly shorting short-term Treasuries, is nearly certain to make a profit. The underpricing on some SLABS relative to Treasuries exceeded 22% during the crisis. I find that residual sources of risk that can cause a loss on the near-arbitrage trade, such as hyperinflation and default by the government on its loan guarantee, can explain at most one eighth of the underpricing. My findings add to a growing literature that provides support for the slow-moving capital explanation of arbitrage persistence. They also provide guidance on the timing and lending terms of central banks' temporary programs of liquidity provision.

In the second essay (co-authored by Adam Ashcraft), titled “On the ability to securitize underperforming pools: the case of private student loans”, we study the sources of asymmetric information between securitizers and investors in securitized pools and quantify the shift in default that can be achieved by exploiting the coarse disclosure on credit score. The default-maximizing pools constructed by exploiting the non-linearity and convexity of default with respect to credit score at securitization, in the presence of disclosure limited to the mean credit score and proportion with credit score below 630, have cumulative default that are between 20%-40% higher than pools constructed with the same data that rely on random draws. We also study the consequences of those potential shifts for holders of various claims on the cash flows produced by the securitized pools, namely the holders of the senior, junior and equity tranches.