Majid Hasan

Accounting, Law, Finance and Economics Department

Research Assistant

Phone : +65-6653-8585

E-mail : Majid.Hasan@edhec.edu

EDUCATION

02-2014-Present	**EDHEC Risk Institute - Asia, Singapore** *PhD in Finance*
June 2014	**CFA Level II Candidate**
November 2013	**Passed FRM Level I Exam**
September 2013	**Western University, London, ON** *Master of Science in Financial Mathematics*
September 2008	**University of the Punjab, Lahore, Pakistan** *Bachelor of Science in Physics*

PROFESSIONAL EXPERIENCE

- **EDHEC Risk Institute - Asia Singapore**
  Research Assistant January 2014 – Present
- **Western University London, Ontario**
  Research Assistant, Financial Mathematics Group September 2011 – December 2013
- **University of British Columbia Vancouver, British Columbia**
  Teaching Assistant, Physics January 2010 – August 2011

EXPERIENCE SUMMARY

Financial Analysis Experience:

- Constructed a Valuation Framework for the Peterborough Prison Social Impact Bond
  - Modeled the impact of prison rehabilitation programs on reconviction rate by fitting the skew normal and beta distributions to the outcomes of past rehabilitation programs.

  - Estimated sensitivity of the bond's yield to maturity to interest rates and payment times.
  - Calculated the fair price of the bond by adjusting both for the risk associated with the payout and the ambiguity involved in the underlying model for the reconviction rate.
  - Studied the effect of the bond's social return on the fair price for a socially responsible investor – one who would be willing to trade off financial return for social return.
  - Studied the effect of the bond's notional and cap rate on the bond's profitability and social impact and identified the optimal bond structure that maximize the bond's total impact.
  - Provided a mechanism for the government to use the price information from each issuance of the bond to maximize the total impact over several issuances of such bonds.

- <u>Studied Stock Market's Short Term Response to Liquidity Shocks</u>
  - Analyzed London Stock Exchange data for 750,000 liquidity shocks – large trades that widen the bid-ask spread – using regression models and SHARCNET's supercomputing facilities.
  - Identified volume weighted average price of the security as the most important variable in determining the spreads immediately after the shock.
  - Found that the spreads don't return to pre-shock levels until 50 quote updates after the shock.
  - Found the above results to be independent of the security involved.

- Studied Asset Correlations During 2008 Financial Crisis
  - Obtained returns on bond, stock and commodity indices using Bloomberg Terminal.
  - Found that cross-sector correlations increased during the financial crisis.
  - Found that the correlation between emerging & developed equity markets increased the most.

Presentation Experience:

- <u>AMMCS, Waterloo, Ontario, August 26-30, 2013.</u>
  - Presented my work on the Peterborough Prison Social Impact Bond at the international Applied Mathematics, Modeling and Computational Science Conference, 2013.

Public Relations Experience:

- <u>Helped Organize Western Research Forum</u>
  - Contacted local businesses to raise funding for the event.
  - Helped in drafting letters of invitation to keynote speakers.
  - Spread awareness about the event through departmental mailing lists, and social media.

Leadership Experience:

- <u>Served as the Head TA for Physics Lab at UBC</u>
  - Assigned duties to other TAs to setup and carry out lab experiments.
  - Gathered feedback from students and TAs about the lab experiments.

- Restructured lab schedule so that TAs conduct and grade experiments of their choice.

Programming Experience:

- Built an Excel Compatible R Package for Option Pricing
  - Wrote R functions to price European, Asian, and American options.
  - Constructed a portable R package to call these functions from within Excel spreadsheets.
- Integrated Mathematica Functionality with Excel
  - Built a Visual Basic application to use Mathematica's inbuilt functions in Excel calculations.
- Designed an Online Content Management System
  - Designed a MySQL database structure, and a search algorithm to organize content in folders.

AWARDS

- Faculty of Science Graduate Award at UBC, 2010.
- Best Physics Teaching Assistant Award at Lahore University of Management Sciences, 2009.
- Gold Medal in B.Sc.(Hons), 2009.

SKILLS AND ACTIVITIES

Languages: Fluent in Urdu, Hindi, Punjabi and English

Technical Skills: C/C++, VB.NET, SQL/MySQL, VBA, R, Mathematica/MATLAB, STATA, Bloomberg Terminal, Super/Parallel Computing (SHARCNET), PHP.

Activities: Member of CFA Society Toronto, Member of the Emerging Leaders London.

PERSONAL INFORMATION

LinkedIn Majid Hasan
Twitter @mjdhasan