Manvendra Tiwari, FRM, CAIA

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EDUCATION

University of Florida , Gainesville, FL Ph.D. Candidate in Finance	2016-2022 (expected)
IIM, Lucknow, India MBA in Finance	2006-2008
IIT , Guwahati, India B.Tech. in Mechanical Engineering	2000-2004
FRM (Financial Risk Manager) Global Association of Risk Professionals	2010
CAIA (Chartered Alternative Investment Analyst) CAIA Association	2011

RESEARCH INTEREST

Corporate Finance, Financial Intermediation, Market Microstructure, and Derivatives

JOB MARKET PAPER

"Stress Tests and Bank Opacity – A MIMIC Model"

Abstract: Banks are considered more opaque than non-financial firms due to the type of assets they own. Different measures of opacity have been used in the literature, but most of them are noisy proxies for the 'true opacity.' Searching for a better proxy for the 'true opacity' of banks, I propose a new approach based on the MIMIC model of Joreskog and Goldberger (1975). The model assumes that bank opacity is unobservable and latent, but there are several observable causes and indicators of opacity. The MIMIC model assumes that the latent opacity is caused by the type of bank assets (i.e., types of loans, trading assets, etc.) and banks' information environment (i.e., number of analysts covering banks and number of 8-K filings). In addition, market microstructure variables are used as proxies for indicators of opacity. Using latent opacity computed from the MIMIC model and parametric and nonparametric regression discontinuity design ('RDD'), I study the impact of stress tests on the opacity of banks. I find that the opacity of mid-size banks (\$10B<Assets<\$50B) performing bank-run stress tests increased significantly for the period they were not required to disclose the results to the public. Large banks (Assets>\$50B) that are required to release the results to the public had no significant difference in opacity before and after stress tests. The findings suggest that stress tests without public disclosure generate additional insider information that is not available to the public, causing increased adverse selection problems and opacity.

AWARDS & ACHIEVEMENTS

- Outstanding Doctoral Student Paper Award at Southern Finance Association Annual Meeting 2020
- Distinguished Student Paper Award at Eastern Finance Association Annual Meeting 2020
- Finalist Office of Financial Research Ph.D. Symposium on Financial Stability, 2019
- Awarded travel grant from UF Office of Research to attend Eastern Finance Association Annual Meeting 2020
- Beta Gamma Sigma Honor Society, 2018
- Graduate Student Assistant in Ph.D. in Finance Program, University of Florida (2016-Present)
- Certificate of Academic Excellence for being among top 10 students of the MBA batch of 2008 at IIM Lucknow
- Awarded 'The Central Bank of India' scholarship for scholastic performance at IIM Lucknow (2007-2008)
- Awarded Silver Medal for 1st rank in B. Tech, Mechanical Engineering at IIT Guwahati in 2004
- Achieved absolute SPI (10/10) in consecutive last two semesters at IIT Guwahati
- Represented IIT Guwahati in Indo-European Winter Academy 2002 and 2003 at IIT Kanpur and IIT Guwahati, respectively (Winter Academy is an annual academic event, organized by the University of Erlangen-Nuremberg, Germany & the seven IITs to bring together bright students in a learning environment and get them enthused about contemporary challenges in science and engineering)

CONFERENCE PRESENTATIONS

• Financial Management Association (FMA) Annual Meeting (Presenter)	2020
• Southern Finance Association (SFA) Annual Meeting (Presenter and Discussant)	2020
• Eastern Finance Association (EFA) Annual Meeting (Presenter and Discussant) *	2020
\bullet Southwestern Finance Association (SWFA) Annual Meeting (Presenter and Discussant)^+ $~$	2020
• International Finance & Banking Society (IFABS) Medellín Conference (Presenter)	2019
• Florida Finance Conference (FFC) (Discussant)	2019
*Cancelled due to Covid-19 pandemic	
⁺ Not able to attend due to Covid-19 pandemic	

RESEARCH ASSISTANTSHIP

- Assisted Prof. Mahendrarajah Nimalendran with data collection on Secondary Public Offerings from SDC (Securities Data Corporation), TAQ, CRSP, and IBES.
- Assisted Prof. Mahendrarajah Nimalendran with the estimation of liquidity parameters from Optionmetrics and variance ratio using TAQ
- Assisted Prof. Nitish Kumar with the estimation of earnings surprise from IBES and the probability of default using the KMV-Merton model

TEACHING EXPERIENCE

Instructor, University of Florida	
 Financial Management (FIN4414) - Undergraduate Level Instructor Rating - 4.44/5.00 (Mean); 4.60/5.00 (Median) Instructor Rating - 4.17/5.00 (Mean); 4.50/5.00 (Median) (Department mean: 3.74) 	Summer 2020 Summer 2019
Teaching Assistant , University of Florida Corporate Finance (FIN6425) - MBA	2019-2021
Mahendrarajah Nimalendran, Professor of Finance Asset Valuation, Risk and Return (FIN5437) - MBA Mahendrarajah Nimalendran, Professor of Finance	2017-2021
Equity and Capital Markets (FIN4504) - Undergraduate Level Nitish Kumar, Assistant Professor of Finance	2017-2021

PUBLICATIONS

"Empirical Study of the effect of including Skewness & Kurtosis in Black Scholes option pricing formula on S&P CNX Nifty Index Options" with Rritu Saurabha, ICFAI Journal of Derivatives Markets, April 2008

Abstract: The most popular model for pricing options, both in financial literature as well as in practice, has been the Black-Scholes model. In spite of its widespread use, the model appears to be deficient in pricing deep-in-the-money and deep-out-of-the money options using statistical estimates of volatility. This limitation has been taken into account by practitioners using the concept of implied volatility. Many improvements to the Black-Scholes formula have been suggested in academic literature for addressing the issue of volatility smile. This paper studies the effect of using a variation of the Black-Scholes model (suggested by Corrado and Sue incorporating non-normal skewness and kurtosis) to price call options on S&P CNX Nifty. The results strongly suggest that the incorporation of skewness and kurtosis into the option pricing formula yields values much closer to market prices. Based on this result and the fact that this approach does not add any further complexities to the option pricing formula, it is suggested that this modified approach should be considered as a better alternative.

"Estimation of Cooling Load using Fuzzy Set Theory", with U. S. Dixit and S. C. Mishra, International Symposium on Recent trends in Heat and Mass Transfer, IIT Guwahati, India, January 6-8, 2002

Abstract: The paper presents a methodology to compute cooling load in the presence of uncertainties in the weather conditions and imprecise information. Fuzzy set theory is used for the estimation of cooling load. Maximum and minimum temperature of the day, humidity, and the number of occupants are treated as fuzzy parameters to calculate cooling load using fuzzy arithmetic. This provides cooling load as a fuzzy parameter. Then a method is proposed to defuzzify it based on the user requirement.

ADDITIONAL TRAINING & EDUCATION

- Causal Inference Workshop organized by Northwestern University and Duke University Jun-2017 on the theory and statistical methods of causal inference
- ESTIMATE (Early Summer Tutorial in Modern Applied Tools of Econometrics) Jun-2018 workshop by Prof. Jeffrey Wooldridge and Prof. Tim Vogelsang
- Summer School on Structural Estimation in Corporate Finance organized by Prof. Toni Aug-2019 Whited and Prof. Luke Taylor

SKILLS

Programming: SAS, Stata, Python, MATLAB, R, C/C++, Visual Basic, SQL

Databases: Wharton Research Data Services (TAQ, CRSP, Compustat, IBES, OptionMetrics, Bank Regulatory, SEC Analytics Suite), Bloomberg Terminal, DataStream (Thomson Reuter EIKON), SDC Platinum, Pitchbook

Language: English, Hindi

CORPORATE WORK EXPERIENCE

ICICI Securities Limited, India – Asst. Vice President (Investment Banking)	May 2008-Aug 2015
Miebach Consultancy Private Limited, India - Intern	Apr 2007-May 2007
Dassault Systèmes, India - Software Engineer	Apr 2005-Jun 2006
TVS Motor Company Limited, India - R&D Engineer	Jul 2004-Apr 2005
Maruti Udyog Limited, India – Intern	May 2003-Jun 2003
Artificial Limbs Manufacturing Corporation of India - Intern	May 2002-Jun 2002

REFERENCES

Mark Flannery (Co-Chair)

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Nitish Kumar

Assistant Professor of Finance Department of Finance, Insurance, and Real Estate Warrington College of Business University of Florida Phone: +1 (352) 392-0115 Email: <u>nitish.kumar@warrington.ufl.edu</u>

Mahendrarajah Nimalendran (Co-Chair)

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