

FSRM Newsletter

From the FSRM Director

Welcome to the third issue of the FSRM newsletter! I hope you all had a joyful holiday between semesters and that you have been enjoying the unusually mild winter weather since then. At the beginning of this New Year and this new semester, a new student-run organization, the "Financial Statistics and Risk Management Society" (FSRMS) has come into being. In this issue, President Brad Knepper introduces us to the FSRMS organization and outlines its agenda for 2012. In addition, some of the officers in this new organization are profiled along with Brad Knepper. These are the Vice Presidents Chris Riley and Heng Tan.

Xingzhi Yu writes about our field visit to Bloomberg headquarters in New York City last December and, since the last issue, we have enjoyed two excellent practitioner seminars by Dr. Eric Pan and Dr. Steven Zhu who are also on the FSRM advisory board.

We hope you continue to enjoy this newsletter. Please keep the news and feedback coming in.



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Financial Statistics and Risk Management Society

by Brad Knepper

In November, the Financial Statisticians and Risk Managers Society formed as a student-run organization for the FSRM Master's program. The goal of the organization is to enhance the education and career advancement of its members through practical and analytical application of statistics to finance. During the first meeting, students voted for elected officers and discussed further plans for the club. The positions for elected officers included the roles of President, Vice President, Treasurer, Secretary, Vice President of External Affairs, Vice President of Marketing and Communication, and Vice President of Events and Planning.

The roles of the elected officers were also formed and implemented in the organization's Constitution. The President will arrange and preside over all meetings. The Vice President will assist the President, as well as oversee committees such as the newsgroup. The Treasurer will oversee the management of organization funds. The Secretary will record the minutes of meetings, as well as communicate with all members. The Vice President of External Affairs will serve as liaison to the Graduate Student Association. The Vice President of Events and Planning will oversee the coordination and planning of events. The Vice President of Marketing and Communication will promote the organization.

As discussed, there will be a weekly news group discussion on current events pertaining to statistics in finance as well as macroeconomic news. The purpose of the newsgroup is to keep students informed about global policy and

economic events that have a significant impact on financial markets. "I am looking forward to the newsgroup because I will be able to share what I have read in the news and talk about it with the group, so they can be informed too" said student Qiaochu Song. "I have realized that learning about news events is an important supplement to my education in statistical finance" she said.

In addition, the organization also talked about FSRMS committees to help students learn various programming languages such as R, C++, and Matlab. Having knowledge of a language such as C++ is beneficial because it gives you the opportunity to actually implement statistics into writing code," said student Arjun Sridharan. "C++ is specifically good to learn because of its widespread use in finance." Also, many students are planning on taking exams for Risk Management, such as the GARP exams. A study group was proposed to help all interested students study for the certification exams, since they provide proof of students' knowledge. The formation of the FSRMS organization has received strong interest from students and hopes to continue the momentum into the Spring semester.

Elected Officers

- Bradley Knepper President
- Christopher Riley Vice President
- Sheeraz Hyder Secretary
- Vaibhav Desai Treasurer
- Qiaochu Song Vice President of External Affairs
- Patrick Ewane Vice President of Marketing and Communication
- Heng Tan Vice President of Events and Planning

FSRMS Agenda for 2012:

Create an advanced trading system in C++ with executable code, and implementation of statistical techniques.

Group Discussion and News

1. Discussion of Weekly Macroeconomic Events
2. Educational opportunities to learn about Macroeconomics
3. Weekly newsletter of Macroeconomic Events

Career Preparation and Advancement

1. General interview formats
2. General interview questions
3. Special questions, e.g. Brainteasers

Analytical Research Group

1. Research and discussion of whitepapers, and reports
2. Learning of new software and computer languages such as C++, Matlab, Java, SQL

Networking and Field Trips

1. Meeting with industry professionals, e.g FSRM advisors
2. Trips to financial firms
3. Networking/career fair events

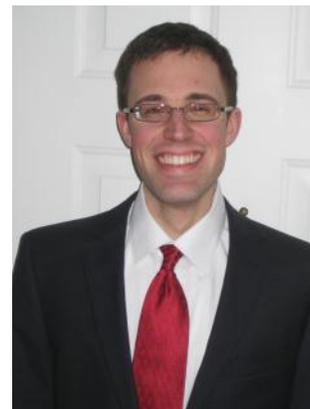
Study Group

1. Optimal use of resources, e.g. conference rooms
2. Exam certifications

FSRMS Officers Profile

Brad Knepper received a Bachelor of Arts in Economics, with a Concentration in Mathematics from Lafayette College in 2008. While at Lafayette, he was a member of the Varsity Swimming Team, as well as a member of the Investment Club. Through studying economics, Brad was exposed to Econometrics, which sparked his interest in statistics. Some of his projects in Econometrics include modeling of the Euro-Dollar and Pound-Dollar exchange rates.

He interned at Merrill Lynch on the Fixed Income trading floor, where he assisted traders with client inquiries, and analyzed data for the Derivatives and Government Issue desks. In 2007, Brad completed an internship in the International Treasury department of Johnson & Johnson. His primary responsibilities included managing a \$2 billion credit line with Citibank. In addition, he also wrote daily reports on changes in foreign exchange rates, with emphasis on currencies in the Emerging Markets. Brad currently works for Johnson & Johnson as a Sales Support Analyst, where he manages sales accounts in excess of \$60 million. The position involves gathering sales data, and forecasting sales to plan for product demand.



“Data analysis has always been any interest of mine. I was first exposed to analyzing economic data through Econometrics. Through the FSRM, I am continuing my passion and using the methods taught in the courses to make sense of financial data sets. It is challenging to apply statistics to financial data, but given the volatility of the recent past, it is important in order to manage risk.”



Christopher Riley received a bachelor's in Mathematics from Montclair State University, while working full time as a barista. He was an officer in the Anime club, one of the biggest active organizations at his school. From balancing his responsibilities both in and out of school and working in a fast paced, ever changing environment requiring strong interpersonal skills, coordinating teamwork and quickly adapting. Chris also participated yearly in “Alex’s lemonade stand” a non-profit organization dealing with childhood cancer.

As a math major, he showed adept problem solving skills along with strong logic. Chris shows an ability to quickly familiarize with new programs and different modes of thinking. He is a self-taught programmer and for-fun gamer (reached the top 2% of a popular MOBA, multiplayer online battle area, called League of Legends which has over 2 million players). He is now starting a new organization, FSRM society, as Vice president. Working on the FSRM degree has given him new insights into understanding marketing strategies and to prepare him into the world of financial analytics.

“I really enjoy the challenges in this program, and the diversity in our classroom. Everyone is brilliant and I love how we’re dealing with real world data in ways that people in the field do it.”



Heng Tan is a newly elected a FSRMS' vice president of Events and Planning. He received his bachelor degree in Statistics from Central University of Finance and Economics, China. Although attending Rutgers right after graduating from college, he has obtained a great working experience in finance industry. While studying, he interned at several companies such as Bank of China, National Bureau of Statistics of China, and China Orient Asset Management Corporation. He was also a research assistant at Computer Assisted Telephone Interview (CATI) Lab in the project of surveying consumer confidence index, and a Team Leader, National Undergraduate Innovative Research Project. When asked why he chose FSRM program at Rutgers, he said

"FSRM program has exactly what I want to have when I finish this program, a combination of sophisticated statistical methods and a deep understanding of finance. Most of my knowledge in applied statistics I have learned in college was in the context of economics and finance. I found it very interesting, and I wished to continue financial statistics especially quantitative investment. Making money or not, like a ball game, win or lose, except we need to think thoroughly and carefully build our model to find the magic behind the data."

Our Bloomberg headquarters tour

By Xingzhi Yu

On December 7th, 2011, a group of FSRM students took a tour in Bloomberg headquarter in New York City. The students were impressed by this company's open culture. Throughout the building, there are no closed areas and the meeting rooms are installed with glass windows. Every meeting room has the names of the country with Bloomberg offices. This allows the employees to communicate transparently and cooperate more efficiently. Every floor has the fish aquarium and beautiful art work which creates very comfortable atmosphere and inspired the employees' innovations. There are hundreds of Bloomberg terminals that connect the world users and provide the updated financial information. The students were told that Bloomberg L.P. is one of the largest financial news corporations in the world. They also learned the functions of different departments in the company. This visit helped the students to gain the first-hand insight into the company culture and their daily business. The trip was very educational and the students had a better understanding of financial business

Practitioner Seminars

By Neville O'Reilly



Practitioner seminars are one of the main avenues by which we stay in touch with the thought leaders in the industry and get exposure to real world applications of the methods that we learn in the program. At the end of November, Dr, Eric Pan, talked about "The quantitative problems in FX electronic market making". Dr. Pan is an Executive Director at Morgan Stanley, where he is the global head of FX e-trading Strategies. The team develops quantitative trading strategies for the FX e-Commerce business. These include pricing and hedging strategies that optimize for market liquidity, and strategies that actively manage

return and risk based on quantitative factors. Dr. Pan has a PhD degree in Mechanical and Aerospace Engineering from Princeton, and a BS degree in Physics from Beijing University.

Towards the end of January, Dr. Steven Zhu, Senior Vice President, Head of Risk Methodology and Bank of America talked about “The Financial Crisis and Risk Management – Lessons and Challenges”. He discussed the need for changes in the risk management oversight and policies of both large institutions and sovereigns in the light of the failure to contain systemic risk during the crisis.

Events Past and Forthcoming

Rutgers MFW Quant Summit: On February 9, many of the FSRM community, along with other Rutgers students, alumni and faculty and finance professionals attended a discussion between four distinguished quantitative finance legends on the state of the industry and lessons learned from the financial crisis. Bob Litterman, Former Chairman of Goldman Sachs Quantitative Investment Strategies Group; Bruno Dupire, Head of Quantitative Research at Bloomberg; Leslie Rahl, Founder and Managing Partner of Capital Market Risk Advisors; and Elie Ayache, CEO of ITO 33, answered questions put by Wall Street journalist Robert Lenzner on an array of topics ranging from risk management before and after the crisis, the use and misuse of derivatives, the importance of being able to communicate with non-quants and volatility in today’s markets.

5th Annual LIBOR Finance Summit: Upcoming Thursday, March 8, 6:00 pm at The Heldrich in New Brunswick. The theme of the summit is “Navigating the Evolving Alternative Investments Landscape”

Big East Annual Career Fair: Upcoming Friday, March 9 for 10:00 to 3:00 in Madison Square Garden, New York. Many of the FSRM community will be attending this recruiting event which includes employers from the Finance and Insurance Industries

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**We welcome your comments,
news, and suggestions!**

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