

# **Cara M. Marshall, Ph.D.**

[www.qc-econ-bba.org/facultypages/marshall](http://www.qc-econ-bba.org/facultypages/marshall)

## **Short Bio:**

Cara Marshall is Lecturer of Economics/Finance at Queens College, City University of New York. Her research interests focus on derivatives and financial engineering, as well as behavioral and experimental methods in finance. Cara's Ph.D. dissertation examined the pricing of volatility on U.S. options exchanges. The first half of the study speaks to the efficiency with which the market prices index volatility (as derivable from index options) relative to the individual volatilities of the index's components (as derivable from equity options). This has important implications for a particular type of volatility trading, known as dispersion trading, that is practiced by some hedge funds and by proprietary trading desks of some banks. The second half of the study compared the implied volatilities of individual stocks derived in two different ways. The first is the now traditional method of simply extracting the implied volatility directly from an option's price. The second method involved deriving the implied volatility of a stock from the stock's historical beta and from the implied volatility of an index of which the stock is a part. Some of Cara's research can be found on her website.

Prior to academia, Cara worked in internet engineering, developing websites and an online platform for online course delivery. She has also worked as a marketing manager for a conference and training company. Over the years, Cara has consulted to several investment banks in the capacity of a training consultant. In this role, she taught financial modeling to bank employees in New York, London, and Singapore. Cara has also performed analysis for hedge funds and for firms in other industries, most recently, General Electric.

## **Education**

Ph.D. in Financial Economics, September, 2008.  
Fordham University.

MBA with a focus in Quantitative Analysis, December 2002  
St. Johns University.

BS in Marketing, Computer Information Science Minor, May 1999  
State University of New York College at Oswego.

## **Academic Positions**

**Lecturer of Economics/Finance, Queens College of the City University of New York**  
*Fall 2006 To Present*

Teach courses on financial modeling using Microsoft Excel (CSCI018), and Corporate Finance at the undergraduate and graduate level (BUS241 and ECON715). Additional duties include student advisement and department website development and maintenance.

**Adjunct, Queens College of the City University of New York**

Fall 2004 To August 2006

Taught classes on financial modeling using Microsoft Excel (CSCI018) and Marketing (BUS243).

## **Publications**

### **Books**

Editor (with Tanya Beder) of Financial Engineering: The Evolution of a Profession. Published by Wiley-Blackwell. Publication is planned for spring 2010.

### **Journal Articles**

“Dispersion trading: Empirical evidence from U.S. options markets,” *Global Finance Journal* 2009, 20(3), 289-301.

“Replication of Vinod & Morey’s (2002) JOI Article and Porting to Excel,” *Indian Journal of Economics & Business*, December 2005, Volume 4 no: 2. The original work was titled, “Estimation Risk in Morningstar Fund Ratings,” H.D. Vinod and Mathew R. Morey, *Journal of Investing* Vol. 11 (4), 2002, 67-75.

### **Chapters in Books**

“A Profile of Financial Engineering Curricula”, a contribution to Financial Engineering: The Evolution of a Profession. Published by Wiley-Blackwell. Publication is planned for spring 2010. Editors: Cara M. Marshall and Tanya Beder.

“Careers in Financial Engineering”, a contribution to Financial Engineering: The Evolution of a Profession. Published by Wiley-Blackwell. Publication is planned for spring 2010. Editors: Cara M. Marshall and Tanya Beder.

“Monte Carlo Simulation in the Pricing of Derivatives”, a contribution to Financial Derivatives: Pricing and Risk Management. Published by Wiley-Blackwell, 2009. Editors: Robert W. Kolb and James A. Overdahl.

“The Use of Derivatives in Financial Engineering: Hedge Fund Applications”, a contribution (with John F. Marshall) to Financial Derivatives: Pricing and Risk Management. Published by Wiley-Blackwell, 2009. Editors: Robert W. Kolb and James A. Overdahl.

### **Working and Conference Papers**

“Isolating the Systematic and Unsystematic Components of a Single Stock’s (or Portfolio’s) Standard Deviation” working paper.

“Volatility-Based Pairs Trading: Empirical evidence from U.S. options markets” working paper.

“Volatility Trading: Hedge Funds and the Search for Alpha” presented at 34<sup>th</sup> Annual Conference of the Eastern Economic Association, Boston (March, 2008).

## **Industry Work Experience**

### **Vice President for Learning Technologies, Marshall, Tucker, and Associates, LLC, Port Jefferson, NY (Part-Time Consultant)**

*July 2002 To March 2008*

- Conducted training on financial modeling for clients (investment banks)
- Marketed the Firm's services and assisted in the development of the Firm's online courses
- Designed and implemented a database in Access to track contracts, clients, and associates and to generate useful queries and reports
- Developed and marketed a comprehensive database-driven website which listed all of the courses the Firm offered (200+) with descriptions and instructors
- Designed and built an infrastructure to deliver courses online

### **Marketing Manager, Institute for International Research, New York, NY**

*October 1999 To July 2002*

- Designed and implemented multiple marketing plans per month
- Analyzed target markets and determined optimal approach to campaign success
- Created content for targeted campaigns and managed brochure creation and printing
- Acted as primary contact between my department and the internal web department
- Created and tracked e-mail campaigns through an outsourced web-based software program
- Developed and carried out agreements with endorsers on multiple programs per month
- Assisted in database build out and interacted with database manager regularly
- Trained and managed marketing assistants and senior list researchers
- Monitored success of marketing plans and made changes accordingly
- Designed and implemented company-wide software application (using Excel) to be utilized for budgeting and media mix planning
- Developed report templates for my team to use when querying our Access database
- Managed and distributed monthly e-newsletter containing articles of interest to target audience

### **Supreme Court Justice, Student Association, SUNY Oswego**

*September 1998 To May 1999*

- Revised student organizations' constitutions and enforced Student Association policies
- Advised student leaders during weekly office hours

### **Intern, Merrill Lynch, New York, NY**

*Summer 1998*

- Initiated direct mail campaign and 401K plan questionnaire
- Researched prospective investment opportunities using Bloomberg and the internet
- Assisted in the development of a growth fund investment portfolio
- Managed personal financial consultant's customer database

### **Student Association Executive Board, Appointed 2 terms, SUNY Oswego**

*September 1996 To May 1998*

- Acted as a liaison between executive cabinet and student organizations
- Advised cabinet on issues involving student organizations

## **Computer Languages and Software Skills**

Microsoft Office, HTML, iHTML, SQL, Visual Basic, Macromedia Flash, SPSS, SAS, R, Bloomberg

## **Honors and Awards**

Sigma Iota Epsilon Business Honor Society, St. John's University, inducted Spring 2002

Vice President of Student Affairs Leadership Award, SUNY Oswego, 1998-1999

Oswego State Women's Center Student Leadership Award, 1997 and 1999

Phi Beta Kappa Business Honor Society, SUNY Oswego, inducted Spring 1999