Srikant Marakani

Contact Information

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Research Interests

- Consumption based asset pricing
- Modeling and pricing of derivatives securities

Education

- Ph.D., Finance, Expected 2010
  Northwestern University, Kellogg School of Management
  Title : **Essays on asset pricing with long run risks**
  Committee : Prof. Ravi Jagannathan (Chair), Prof. Jonathan Parker, Prof. Robert Korajczyk, Prof. Martin Eichenbaum
- M.S., Physics, **University of Chicago**, 2004
- M.Sc., Physics, **National University of Singapore**, 2003
- Passed the CFA (Chartered Financial Analyst) level I examination
- B.Sc., First Class Honors, Computational Physics, **National University of Singapore**, 1995-98

Working Papers

- **Long run risks, the factor structure of price dividend ratios and the cross section of stock returns**, Job market paper
  - In this paper, I show that long run risk models and their generalizations imply that the log price dividend ratios of assets have a strict factor structure, that these factors are related to consumption growth volatility and future consumption/dividend growth, and that the expected excess returns of assets are a linear function of the covariance of their returns with these factors and their innovations. I use factor analysis to show that the post 1942 log price dividend ratios of the 25 Fama-French portfolios have two significant factors, one of which is related to consumption growth volatility and the other to future consumption/dividend growth. I find that these factors and their innovations are able to explain not only the cross section of returns of the 25 Fama-French portfolios, but also that of portfolios constructed on the basis of long term reversal, short term reversal and the earnings to price ratio with an implied risk aversion of about 50. I also find that real time consumption growth is able to predict future excess market returns, both in and out of sample.
- **Long run risks : Are they there?**, Note
  - In this note, I find that the Bansal and Yaron long run risk model is inconsistent with consumption growth variance ratios during the period 1929-2008 but that it is consistent with them after 1942. I show that the model is unable to explain the equity premium with a low relative risk aversion value, even after accounting for time aggregation, as is claimed in some earlier studies. These findings imply that there is little evidence that the long run risk model solves the equity premium puzzle with the use of aggregate consumption data. However, I also find strong evidence of significant long term autocorrelations in services consumption growth. This shows that long run consumption risks are present in the data but that a multiple goods formulation of the model might be necessary to solve the standard asset pricing puzzles.

In Progress

- **A trend-stationary long run risk model**
- **Equity duration, long run volatility risks and the value premium**

Publications

- **A quantum field theory term structure model applied to hedging**, International Journal of Theoretical and Applied Finance, Vol. 6, No. 5, pg. 443-468, 2003, with Belal E. Baaquie and Mitch C. Warachka.
- **Comparison of field theory models of interest rates with market data**, Phys. Rev. E 69, 036129, 2004, with Belal E. Baaquie.
- **Finite hedging in field theory models of interest rates**, Phys. Rev. E 69, 036130, 2004, with Belal E. Baaquie.
- **Hamiltonian and potentials in derivative pricing models : Exact results and lattice simulations**, Physica A, 334, pg. 531-557, 2004 with Belal E. Baaquie and Claudio Coriano.

Invited Talks

- **Hedging in field theory models of the term structure**, Third International Econophysics Conference, Bali, Indonesia, Aug. 29-31, 2002.

Referee

- Referee for the journal *Finance Research Letters*.

Teaching Experience

- Teaching Assistant, Finance department, Northwestern University, Fall 2006 - Spring 2008
  - *Derivatives* (Undergraduate), Prof. Kathleen Hagerty
  - *Finance I* (MBA), Prof. Camelia Kuhnen
  - *Derivatives I* (MBA), Profs. Kathleen Hagerty, Robert McDonald, Viktor Todorov, Craig Furfine
  - *Derivatives II* (MBA), Profs. Robert McDonald, Viktor Todorov
  - *Corporate Finance* (MBA), Prof. Mitchell Peterson
  - *Fixed Income Securities* (MBA), Prof. Debbie Lucas
  - *Advanced Derivatives* (PhD), Profs. Torben Andersen, Debbie Lucas
- Teaching Assistant, University of Chicago, Spring 2004
  - *Quantum Mechanics* (Undergraduate), Prof. Stuart Gazes
- Teaching Assistant, National University of Singapore, 1998 and 2002
  - *Special Programme in Science*, 1998
  - *Quantum Finance* (MSc, financial engineering), Prof. Belal Baaquie, 2002

Work Experience

- Research Assistant (full time), National University of Singapore (Jan 2000 - Aug 2002)
- Financial Engineer, Man-Drapeau Research (Aug 1998 - Dec 1999)

Scholarships and Awards

- Kellogg School of Management fellowship, 2005-present.
- Subrahmanyam Chandrasekhar memorial fellowship, University of Chicago, 2002-2004.
- SIA-NOL scholarship, 1995-1998.
- Individual and team gold medal winner in the Singapore physics Olympiad, 1993.
- Singapore Airlines Youth scholarship, Singapore, 1993-1994.
- National Talent Search Scholarship, India, 1992.

Personal

- Indian citizen
- Languages : English, Hindi, Telugu

References

Prof. Ravi Jagannathan Kellogg School of Management Northwestern University Evanston IL 60208 Phone : +1 847 491 8338	Dr. Ernst Schaumburg Senior Economist Capital Markets Group Federal Reserve Bank of NY 33 Liberty Street New York NY 10045 Phone : +1 212 720 2744	Prof. Jonathan Parker Kellogg School of Management Northwestern University Evanston IL 60208 Phone : +1 847 491 4113