

Publications

Refereed Journals

1. **Bhar, R. and P. Wong:** “Is Jump risk in iTraxx sector indices diversifiable?” *The Journal of Fixed Income*, Spring 2008, 1-15.
2. **Bhar, R. and S. Hamori:** “A New Approach to Analysing Comovement in European Equity Markets”, *Studies in Economics and Finance*, 2008, Vol. 5 (1), 4-20.
3. **Bhar, R. and S. Hamori:** “Information Content of Commodity Futures Prices for Monetary Policy”, *Economic Modelling*, 2008, Vol. 25 (2), 274-283.
4. **Bhar, R. and S. Hamori:** “Analyzing Yield Spread and Output Dynamic in an Endogenous Markov Switching Regression Framework”, *Asia-Pacific Financial Markets*, Vol. 14 (1-2), March 2007, 141-156.
5. **Bhar, R., D. Lee, N. Paramesh, P. Ray, A. Sujanani, and W. Ying:** “The Development of Ontology based Multi-Agent Systems: A Case Study for the Financial Services Domain”, *Accepted for Publications Computing and Informatics*, June 2007.
6. **Bhar, R. and B. Nikolova:** “Analysis of Mean and Volatility Spillover using BRIC Countries and World Stock Index Returns”, *Journal of Economic Integration*, 2007, Vol. 22 (2), 369-381.
7. **Alaganar, V.T. and R. Bhar:** “Time Varying Currency Risk in Country Index Portfolios”, *The Quarterly Review of Economics and Finance*, 2007, Vol. 47, 159-174.
8. **Bhar, R. and S. Hamori:** “Co-movement in the Price of Risk of Aggregate Equity Markets”, *Economic Systems*, 2007, Vol. 31, 256-271.
9. **Bhar, R. and S. Hamori:** “Component structures of Agricultural Commodity Futures traded on the Tokyo Grain Exchange”, *Asia-Pacific Financial Markets*, 2007, Published online February 13, <http://www.springerlink.com/content/g14640r683675227/>.
10. **Bhar, R. and S. Hamori:** “Empirical investigation on the relationship between Japanese and Asian emerging equity markets”, *Applied Financial Economics Letters*, 2006, Vol. 2, 77-86.
11. **Bhar, R. and S. Hamori:** “Linkages among agricultural commodity futures prices: Some evidence from Tokyo”, *Applied Economics Letters*, 2006, Vol. 13, 535-539.
12. **Bhar, R., Chiarella. C., Hung, H. and W. Runggaldier:** “The volatility of the instantaneous spot interest rate implied by arbitrage pricing – A dynamic Bayesian approach”, *Automatica*, 2006, Vol. 42, 1381-1393.
13. **Bhar, R. and S. Hamori:** “A Coincident Financial Indicator for the Australian Stock Market”, *Accepted for publication, Investment Management and Financial Innovation*, 2005, Vol. 2 (3), 39-48.

14. **Bhar, R. and S. Hamori:** "Yield Spread as a Predictor of Economic Growth: Evidence from Japan, Korea and the U.S.", *Eurasian Review of Economics and Finance*, 2005, Vol. 1 (2).
15. **Bhar, R. and S. Hamori:** "Causality in variance and the type of traders in the crude oil futures", *Energy Economics*, 2005, Vol. 27, 527-539.
16. **Bhar, R. and S. Hamori:** "Link between Inflation and Inflation Uncertainty: Evidence from G7 Countries", *Empirical Economics*, 2004, Vol. 29 (4), 825-853.
17. **Bhar, R., Kim, S. and T. Pham:** "Exchange Rate Volatility and Its Impact on the transaction cost of Covered Interest Rate Parity", *Japan and the World Economy*, 2004, Vol. 16, 503-525.
18. **Alaganar, V.T. and R. Bhar:** "Impact of International Listing on Return Distribution: An Intervention Analysis with Australian Stocks", *Journal of the Asia-Pacific Economy*, 2004, Vol. 9, No. 1, 101-117.
19. **Bhar, R. and S. Hamori:** "Empirical Characteristics of the Transitory Component of Stock Return: Analysis in a Markov Switching Heteroscedasticity Framework", *Economics Letters*, 2004, 82, 157-165.
20. **Bhar, R., Chiarella, C. and W. Runggaldier:** "Inferring Forward Looking Equity Risk Premia from Derivative Prices", *Studies in Non-Linear Dynamics and Econometrics*, March 2004, Vol. 8 (1), Article 3.
21. **Bhar, R. and S. Hamori:** "Information Flow between Price Change and Trading Volume in Gold Futures Contracts", *International Journal of Business and Economics*, 2004, Vol. 3, No. 1, 45-56.
22. **Bhar, R. and S. Hamori:** "Evidence of Linkages Among G7 Stock Markets Using Causality in Variance Test", *Finance Letters*, 2003, Vol. 1, No. 1, 35-40.
23. **Alaganar, V.T. and R. Bhar:** "An International Study of Causality in Variance: Interest Rate and Financial Sector Return", *Journal of Economics and Finance*, Spring 2003, Vol. 27, 39-55.
24. **Bhar, R. and S. Hamori:** "Alternative Characterisation of the Volatility in the Growth Rate of Real GDP," *Japan and the World Economy*, 2003, Vol. 15, Issue 2, 223-231.
25. **Bhar, R., Chiarella, C. and T. Pham:** "Modelling the Currency Forward Risk Premium: A New Perspective", *Asia-Pacific Financial Markets*, December 2001, Vol. 8(4), 341-360.
26. **Alaganar, V.T. and R. Bhar:** "Information and Volatility Linkage Under External Shocks: Evidence from Dually Listed Australian Stocks", *International Review of Financial Analysis*, 2002, Vol. 11(1), pp. 59-71.

27. **Bhar, R.** “Return and Volatility Dynamics in the Spot and Futures Markets in Australia: An Intervention Analysis in a Bivariate EGARCH-X Framework”, *The Journal of Futures Markets*, Vol. 21 (9), 2001, pp. 833-850.
28. **Bhar, R., Chiarella, C., El-Hassan, N. and Xiaosu Zheng:** “The Reduction of Forward rate Dependent Volatility HJM Models to Markovian Form: Pricing European Bond Options”, *The Journal of Computational Finance*, Vol. 3, No. 3, 2000, pp.47-62.
29. **Bhar, R. and C. Chiarella:** “Expectations of Monetary Policy Changes in Australia Implied by the Probability Distribution of Interest Rate Derivatives”, *The European Journal of Finance*, Vol. 6, 2000, pp. 113-125.
30. **Alaganar, V.T. and R. Bhar:** “Diversification Gains from ADRs and Foreign Equities: Evidence from Australian Stocks”, in press 2000, *Journal of International Financial Markets, Institutions & Money*.
31. **Bhar, R. and A.G. Malliaris:** “Volume and Volatility in Foreign Currency Futures Markets”, *Review of Quantitative Finance and Accounting*, 10, 1998, 281-298.
32. **Bhar, R. and L. Alles:** “The Information on Inflation in the Australian Term Structure”, *Applied Financial Economics*, 7, 1997, 721-730.
33. **Bhar, R. and C. Chiarella:** “Interest Rate Futures: Estimation of the Volatility Parameters in an Arbitrage-Free Framework”, *Applied Mathematical Finance*, 4(4), 1997, 181-200.
34. **Bhar, R. and C. Chiarella:** “Transformation of the Heath-Jarrow-Morton Models to Markovian System”, *The European Journal of Finance*, 3, 1997, 1-26.
35. **Bhar, R. and C. Chiarella:** “Pricing of Futures Options by Use of Generalised Binomial Lattice Model - An Empirical Study on the SFE”, *Hong Kong Economic Papers*, 24, 1996, 41-54.
36. **Bhar, R.:** “Cointegration in Interest Rate Futures Trading on the Sydney Futures Exchange”, *Applied Financial Economics*, 6, 1996, 251-257.
37. **Bhar, R.:** “Modelling Australian Bank Bill Rates: A Kalman Filter Approach”, *Accounting Finance*, 36 (1), May, 1996, 1-14.
38. **Bhar, R.:** “Do Australian Foreign Exchange Markets Still Show Evidence of Cointegration?”, *Accounting and Finance*, Vol. 35 (2), 197-205, November 1995.
39. **Bhar, R.:** “Martingale Property in Bond Futures Return Including Volatility Spillover Effect From Bank Bill Futures”, *Asia Pacific Journal of Management*, 12(1), 37-48, 1995.
40. **Bhar, R.:** “Testing For Long-Term Memory in Yen/Dollar Exchange Rate”, *Financial Engineering and the Japanese Markets*, 1 (2), 101-109, 1994.

41. **Bhar, R.:** “Interest Rate Futures Options - An Empirical Test of the Ho and Lee Model in the Australian Context”, *Review of Futures Markets*, 12(3), 661-684, 1993.
42. **Bhar, R. and B. F. Hunt:** “Predicting the Short Term Interest Structure Using A Parsimonious Model”, *Review of Futures Markets*, 12(3), 577-590, 1993.
43. **Bhar, R. and B. F. Hunt:** “An Empirical Test of Efficiency of the Market for Bank Accepted Bills Futures”, *International Review of Economics and Finance*, 2(4), 403-415, 1993.

Refereed Edited Volume

1. **Bhar, R.:** “A Jump Diffusion Model for Spot Electricity Prices”, To appear in the Proceedings of the *Mathematics in Industry Study Group (January 2007)*, University of Wollongong.
2. **Bhar, R. and A. G. Malliaris:** “Speculative Non-Fundamental Components in Mature Stock Markets: Do They Exist and Are They Related?”, 2006, *Advances in Quantitative Analysis of Finance and Accounting*, Vol. 3, World Scientific, Singapore, ISBN: 981-256-626-0.
3. **Bhar, R., Chiarella, C. and W. Runggaldier:** “Estimation of Models of the Instantaneous Short Term Interest Rate by Use of a Dynamic Bayesian Algorithm”, in *Advances in Finance and Stochastics*, Klaus Sandmann and Phillip, J. Schonbucher (eds.), Springer, Germany, 2002, pp. 177-196, ISBN: 3-540-43464-X.
4. **Bhar, R. and A.G. Malliaris:** “Are There Rational Bubbles in the U.S. Stock Market? Overview and a New Test,” *Elsevier Science, Asset Price Bubbles: Implications for Monetary and Regulatory Policies*, Vol. 13, ed. George Kaufman, Loyola University of Chicago, 2001, pp. 125-144, ISBN: 0-7623-0845-1.
5. **Bhar, R. and C. Chiarella:** “Analysis of Time Varying Forward Exchange Risk Premia”, *Kluwer Publication, Advances in Quantitative Asset Management*, ed. C. L. Dunis, Liverpool Business School, *Kluwer Publication*, (2000), ISBN: 0-7923-7778-8, pp. 255-274.
6. **Bhar, R. and C. Chiarella:** “Estimating Interest rate Futures Model in the Heath-Jarrow-Morton Framework”, *Advances in Pacific Basin Financial Markets*, Vol. IV, edited by T. Bos and T. A. Fetherston, JAI Press, Greenwich, Connecticut, USA, 1998, 211-226, ISBN: 0-7623-0319-0.
7. **Bhar, R. and C. Chiarella:** “Estimating The Term Structure of Volatility in Bond Prices Using Kalman Filter Methodology”, *Advances in Pacific Basin Financial Markets*, Vol. III, edited by T. Bos and T. A. Fetherston, JAI Press, Greenwich, Connecticut, USA, forthcoming, 1997, 243-256, ISBN: 0-7623-0196-1.
8. **Bhar, R. and C. Chiarella:** “The estimation of the Heath-Jarrow-Morton Model by Use of Kalman Filtering Techniques”, *Computational Approaches to Economic Problems*,

edited by H. Amman, Kluwer Publishing, The Netherlands, 1997, 113-126, ISBN: 0-7923-4397-2.

9. **Bhar, R. and C. Chiarella:** “Non-Linear Filters and Estimation of Diffusion Coefficients in the Heath-Jarrow-Morton Framework”, Postprint Volume of *The 1995 IFAC/IFIP/IFORC/SEDC Symposium on Modelling and Control of National and Regional Economies*, Pergamon, 321-326, ISBN: 0-08-042376-0, February, 1996.
10. **Bhar, R.:** “Testing Uncovered Interest Rate Parity in Australian FX Market Before and After Deregulation”, *Advances in Pacific Basin Financial Markets*, Vol. II, edited by T. Bos and T. A. Fetherston, JAI Press, Greenwich, Connecticut, USA, 183-194, ISBN 0-7623-0093-0, 1996.
11. **Bhar, R. and J. Batten:** “Volume And Price Relationships in Three Yen Futures Markets”, *Advances in Pacific Basin Financial Markets*, Vol. I, edited by T. Bos and T. A. Fetherston, JAI Press, Greenwich, Connecticut, USA, 23-38, ISBN: 1-55938-861-7, 1995.

Contributed Articles

1. **Bhar, R. :** “Credit Default Swaps : Characteristics and Pricing Mechanism:, Special Issue Banking, Intelligence Unit of the Indian Institute of Planning and Management, Volume 1, Issue 3, December 2006, 74-78.
2. **Bhar, R. and C. Chiarella:** “Risk-Neutral Valuation and the State Space Framework”, *The Current State of Economic Science* edited by B. Dahiya, Jan Tilbergen Institute of Development Planning, Rohtak, India, ISBN: 81-7600-042-6, June 1999, 409-416, ISBN: 81-7600-042-6, June 1999, 409-416.
3. **Bhar, R. and L. Alles:** “Embedded Inflation”, *The Blackwell Dictionary of Finance*, edited by Dean Paxson and Douglas Wood, Manchester Business School, 1996.

Refereed Conference Volume

1. **Allen, D., R. Bhar, and S. Peiris:** “Analysis and Applications of Autoregressive Moving Average Models with Stochastic Variance”, International Statistics Conference, Organised by the Institute of Mathematical Sciences, University of Malaya, December 2005.
2. **Bhar, R., N. Paramesh, P. Ray, and A. Sujanani:** “The development of ontology driven multi-agent systems: A case study in the financial services domain”, Business Services Network, March 29, 2005, Hong Kong.
3. **Bhar, R., D. Colwell, and M. U. Peiris:** “A Markov Chain Modulated Short-Term Interest Rate Model and its Comovement across Countries”, Proceedings of the 2004 Workshop on Research Methods: Statistics and Finance, University of Wollongong, December.

4. **Bhar, R. and C. Chiarella:** “Analysis of Time Varying Financial Market Risk-Premia”, 3rd High Performance Computing Asia Conference, IEEE Singapore Computer Chapter, 23-25 September 1998, ISBN: 981 04 0634 7, pp. 909-920.
5. **Bhar, R. and C. Chiarella:** “Estimating The Term Structure of Volatility in Futures Yield - A Maximum Likelihood Approach”, Presented at the Sixth Annual Chicago Board of Trade Asia-Pacific Research Symposium, Hong Kong, March, 1995, pp. 119-148.

Recent Conference Presentation

1. **Bhar, R., Colwell, David and Wong, Peipei:** “Component Structure of Credit Default Swap Spreads and their Determinants”, Presentation at the 13th **FINSIA** (Financial Services Institute of Australasia) in Melbourne, September 29 – 30, 2008.
2. **Bhar, R. and Handzic, Nedim:** “A Multifactor Model of Credit Spreads”, Presentation at the **CREDIT** Conference in Venice, Italy, September 22 - 23, 2008, sponsored by Department of Economics of the University Ca’ Foscari of Venice and ABI - Italian Banking Association.
3. **Bhar, R. and Hammoudeh, Shawkat:** “Commodity, Money, Exchange Rate and the Stock Market: Empirical Analysis of Dynamic Causal Relationship in a Regime Switching Environment”, Presentation at the 83rd Conference of the **Western Economic International**, Honolulu, June 29, 2008 – July 3rd 2008.
4. **Bhar, R. and B. Nikolova:** “Return, Volatility Spillovers and Dynamic Correlation in the BRIC Equity Markets: An Analysis using a Bivariate EGARCH Framework”, Presentation at the **Global Finance Conference**, Melbourne, April 2007. Received *Best Paper Award* (Emerging Markets) section.
5. **Bhar, R. and B. Nikolova:** “Oil Prices and Equity Returns in the BRIC Countries”, Presentation at **All China Economics International Conference**, Hong Kong, December 2007.
6. **Bhar, R. and D. Lee:** “Empirical Investigation of Interest Rate Volatility: A Look at Alternative Specification of Stochastic Volatility Models”, Presentation at **All China Economics International Conference**, Hong Kong, December 2007.

Work in Progress /Papers under Review

1. **Bhar, R. and G. Mallik:** “Has The Link Between Inflation Uncertainty and Interest Rates Changed After The Inflation Targeting? Evidence from Multi-country Analysis”.
2. **Bhar, R., Hammoudeh, S. and M. A. Thompson:** “Component Structure for Non-Stationary Time Series: Application to Benchmark Oil Prices”.
3. **Bhar, R., Hammoudeh, S. and M. A. Thompson:** “Dynamic relationships among Oil Benchmarks and US Macro economy in Presence of Regime-Switching”.

4. **Bhar, R. and B. Nikolova:** “Global Oil Prices, Oil Industry in Russia and Equity Returns in the Russian Equity Market”.
5. **Bhar, R. and B. Nikolova:** Oil Prices and Equity Returns in the BRIC Countries”.
6. **Bhar, R. and C. Chiarella:** “A Model for the Ex-Ante U.K. Stock Market Risk Premium”.
7. **Bhar, R. and S. Hamori:** “Growth Rate in Domestic Credit and Output: Evidence of Asymmetric Relationship from Japan and USA”.
8. **Bhar, R. and S. Hamori:** “Measuring Response of Output Growth to Changes in Yield Spread in a Regime Switching Framework”.
9. **Bhar, R., Chiarella, C. and To, Thuy-Duong,** “Estimating the Volatility Structure of an Arbitrage-Free Interest Rate Model Via the Futures Market”.
10. **Bhar, R., Chiarella, C. and P. Zhu:** “Estimation of the Heath-Jarrow-Morton Model via the Kalman Filter: A Bootstrap Analysis”.
11. **Bhar, R. and A. G. Malliaris:** “Stochastic Trend and Cyclical Components in Dividend Price Ratio”.
12. **Bhar, R. and A. G. Malliaris:** “Macro-Economic Determinants of Excessive Stock Return”.
13. **Bhar, R. and N. Handzic:** “A Structural Model for Fair Valuation of CDOs”.
14. **Bhar, R. and D. Lee:** “Alternative Specifications of Stochastic Volatility with Jumps: An Investigation of Short Term Interest Rates”.
15. **Bhar, R. and D. Lee:** Empirical Investigation of Interest Rate Volatility: A Look at an Alternative Specification of Stochastic Volatility Models”.
16. **Bhar, R., Colwell, D. and M. U. Peiris:** “A Markov Chain Modulated Short-Term Interest Rate Model and The Central Bank Transparency of Actions”.
17. **Bhar, R., Colwell, David and Wong, Peipei:** “CDSwaption pricing based on Heston Model”.