## SUJAY K MUKHOTI

Associate Professor of Statistics Indian Institute of Management Indore. Prabandh Shikhar, Rau-Pithampur Road Indore, Madhya Pradesh, India - 453356

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#### Education

PhD	IIM, Bangalore	2014
M.Sc. (Statistics)	University of Kalyani	2000
B.Sc. (Hons. in Statistics)	Ramakrishna Mission Residential	1998
	College Narendranur (C II)	

#### Current Research

### Submitted

- 2. Banerjee, A. & Mukhoti, S.: Characterization of A Probabilistic Framework for Platykurtic Image Data (*Under Second Review*).
- 1. Ghosh, S. & Mukhoti, S.: Non-parametric generalised newsvendor model (Under Second Review)

### Pre-print

- 5. Ghosh, S. and Mukhoti, S., Sharma, P. & Banerjee, A.: Poor and Sick Newsboy Model: A Robust Generalisation with Misspecified Demand
- 4. Ghosh, S. and Mukhoti, S.: Simulated maximum likelihood estimation of drought risk using particle filters
- 3. Mukhoti, S., Baraiya, R. & Banerjee, A.: Inventory of a Poor News-boy: Generalized News Vendor Problem with Asymmetric Losses
- 2. Mukhoti, S. & Banerjee, A.: Clustering Brain Tissues from MRI data using flat-top feature distributions
- 1. Ghosh, S., Mukhoti, S., Sharma, P. & Banerjee, A.: Generalized Newsboy problem with flexible shape demand distribution

### Publications

10. Ghosh S., Sahare M., Mukhoti S. (2021) A New Generalized Newsvendor Model with Random Demand and Cost Misspecification. In: Sinha B.K.,

- Bagchi S.B. (eds) Strategic Management, Decision Theory, and Decision Science. Springer, Singapore. https://doi.org/10.1007/978-981-16-1368-5\_14
- 9. **Mukhoti**, **S.** and Ranjan, P. (2019): A New Class of Discrete-time Stochastic Volatility Model with Correlated Errors; *Applied Economics*, **51** (3), 259-277
- 8. Mukhoti, S. and Ranjan, P. (2016): Mean-correction and Higher Order Moments for a Stochastic Volatility Model with Correlated Errors; *International Journal of Statistics and Probability*, 5 (4), 102-110.
- 7. Ranjan, P, Mark Thomas, Holger Teismann, and **Sujay Mukhoti** (2016):Inverse Problem for a Time-Series Valued Computer Simulator via Scalarization; *Open Journal of Statistics*, **6** (03), 528-544
- Sengupta, S. and Mukhuti, Sujay (2009): Unbiased Estimation of the Distribution Function of a Two-Parameter Exponential Population Using Order Statistics, Communications in Statistics Theory and Methods, 38(15), 2578-2585.
- 5. Sengupta, S. and **Mukhuti**, **Sujay** (2008): Unbiased estimation of P(X > Y) using ranked set sample data, *Statistics*, **42(3)**, 223-230.
- 4. Sengupta, S. and **Mukhuti**, **Sujay** (2008): Unbiased Estimation of P(X > Y) for Exponential Populations Using Order Statistics with Application in Ranked Set Sampling, Communications in Statistics Theory and Methods, **37(6)**, 898-916.
- 3. Sinha, Bikas K., Das, Kishore K. and **Mukhuti, Sujay** (2008): On Some Aspects of Unbiased Estimation of Parameters in Quasi-Binomial Distributions, Communications in Statistics Theory and Methods, **37(19)**, 3023-3028.
- 2. Sengupta, S. and **Mukhuti**, **Sujay** (2006): Unbiased variance estimation in a simple exponential population using ranked set samples, *Journal of Statistical Planning and Inference*, **136(4)**, 1526-1553.
- 1. Sinha, Bikas K., Sengupta, S. and **Mukhuti, Sujay** (2006): Unbiased Estimation of the Distribution Function of an Exponential Population Using Order Statistics with Application in Ranked Set Sampling, *Communications in Statistics Theory and Methods*, **35(9)**, 1655-1670.

#### Conference Presentations

#### **Invited Talks**

- Mukhoti, S. (May 20-23, 2021): Distribution free estimation of optimal order quantity for a newsboy, IISA International Conference, Virtual Mode
- Mukhoti, S. (Dec. 26-30, 2019): Bayesian stochastic volatility model for dynamic leverage effect, *IISA International Conference*, *IIT Bombay*
- Mukhoti, S., Ghosh, S and Sahare, M (Jan. 4-6, 2020): Estimating Optimum Order Quantity in Generalized Newsvendor Problem, *IAPQR-CSIR-CGCRI SMDTDS International Conference*, Kolkata

- Mukhoti, S. and Ranjan, P. (Jan. 4-6, 2018): On leverage and skewness in contemporaneously correlated Stochastic Volatility Model, *IAPQR International Conference on New Paradigms in Statistics for Scientific & Industrial Research*, Kolkata
- Mukhoti, S. and Ranjan, P. (Dec. 27-30, 2017): Time for Volatility: Skewness and Leverage in Discrete-time Stochastic Volatility Models, *IISA International Conference on Statistics*, *Hyderabad*
- Mukhoti, S (November, 2014): Single factor stochastic volatility model for bounded stationary returns, *Department of Economics, IIT Kanpur*

### Contributory Talks

- Mukhoti, S. (Jan. 2-4, 2020): Bounded Non-stationarity of Dynamic Leverage of Stochastic Volatility, AIMS-17 international conference on management, IIM Kozhikode
- Mukhoti, S. and Ranjan, P. (Dec. 16-18, 2017): On lead-lag correlations in stochastic volatility models with jump, 11th International Conference on Computational and Financial Econometrics, University of London
- Mukhoti, S. and Guhathakurta, K. (April 17 & 18, 2015): Product market performance and capital structure, *TAPMI-CSU international conference in finance, TAPMI, Manipal.*
- Mukhoti, S. (February, 2015): Single factor stochastic volatility model for skewed returns, *International Conference on Applied Economics and Finance, GITAM University, Vishakhapatnam*
- Mukhoti, S & Ghosh, P (January 2013): Simultaneous Modeling of Skewness and Sparse Time-Varying Jumps in Asset Returns with Stochastic Volatility, ISBA Regional Meeting and International Workshop/Conference on Bayesian Theory and Applications (IWCBTA) at Banaras Hindu University, Varanasi, INDIA.
- Mukhoti, S & Ghosh, P (December, 2011): Modeling Stock Market Jump Intensity Dynamics With Macroeconomic Surprises: A Bayesian Approach, *India Finance Conference, Indian Institute of Management, Bangalore.*
- Sengupta, S. & Mukhoti, S (2004): Unbiased variance estimation in exp( λ) population using RSS, Eleventh International Conference SCRA- 2004 FIM XI, Lucknow.
- Sengupta, S. & **Mukhoti**, **S** (March 2003): A note on estimation of distribution function in simple exponential population using Ranked Set Sampling, National seminar on Statistics in Industry, Business and Finance, Department of Statistics, University of Calcutta.

#### Services:

- Served as referee of articles for JRSS (C), Statistical Papers, Sankhya, California Management Review, Statistical Analysis and Data Mining
- Associate Editor: Indore Management Journal (2014-2020)

#### Grants and Awards

- Awarded IIM Indore grant, 2020 for international visit to collaborative institution.
- Awarded IIM Indore international workshop grant, 2020 for participation in Simulation and Monte-Carlo Estimation workshop, Madrid.
- Leading Light Award for Service delivery, 2009 from Global Analytics Center, HSBC.
- Awarded **Senior Research Fellowship** from Council of Scientific and Industrial Research (CSIR) (2004) for research project on "Estimation problems in Ranked Set Sampling and Order Statistics".
- Awarded Junior Research Fellowship from Council of Scientific and Industrial Research (CSIR) (2002) for research project on "Estimation problems in Ranked Set Sampling and Order Statistics".
- S. B Dasgupta memorial endowment award for standing first in first class in M.Sc examination in Statistics.

### Work Experience

Associate Professor	Indian Institute of Management, Indore	June '19 -
Assistant Professor	Indian Institute of Management, Indore	April '14 - June, '19
Visiting Assistant Professor	Indian Institute of Management, Kozhikode QM& OM Area	June'13- March'14
Business Analyst	HSBC, Data Processing India Pvt. Ltd.	Dec'07-May'10
Statistical Analyst	Tyfone Communications India Pvt. Ltd.	Mar'07-Dec'07
Lecturer in Statistics	St. Xavier's College, Kolkata	Aug'05-Feb'07

Research Fellow	Department of Statistics, University of Calcutta	Jul'02- Aug'05
Guest Lecturer, Statistics	University of Kalyani, WB	2002
Visiting Lecturer, Statistics	Bidhannagar College, Kolkata	Aug'01-Mar'02
Lecturer, Statistics	St. Xavier's College, Kolkata	Aug'01-Jun'02
Guest Lecturer, Statistics (Postgraduate Statistics)	University of Kalyani, WB	2001
Visiting Lecturer, Statistics	Acharya Prafulla Chandra College, WB	2000-2001
Part-time Lecturer, Statistics	Barrackpore Rastraguru Surendranath College, WB	2000-2001

# Training and Consultancy

- Certificate Program for Project Management (Joint coordinator)
- Executive program for L&T project management module (Instructor)
- Integrated Program in Business Analytics (Instructor)
- Analytics and Forecasting (Guest Lecturer in MBA, IIM Sirmaur)
- TEQIP, IIT Indore (Guest Lecturer)
- Bayesian Statistics (Guest Faculty at IIM Amritsar)

 $\underline{References}:$  Available on request