Aurobindo GHOSH

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Lee Kong Chian School of Business Singapore Management University (SMU) 50 Stamford Road Singapore 178899

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Education

PhD, University of Illinois at Urbana Champaign, United States of America, 2003 Master of Science, University of Illinois, United States of America, 2002 Master of Statistics, Indian Statistical Institute, India, 1994 Bachelor of Statistics, Indian Statistical Institute, India, 1992

Academic Appointments

Assistant Professor of Finance (Education), Lee Kong Chian School of Business, SMU, Jul 2013 - Present Senior Lecturer of Finance, Lee Kong Chian School of Business, SMU, Jul 2011 - Jun 2013 Assistant Professor of Economics, School of Economics, SMU, Apr 2007 - Jun 2011 Assistant Professor of Economics, School of Economics and Social Sciences, SMU, Jul 2003 - Mar 2007

Academic Administrative Positions

Programme Director, Master of Science in Financial Economics, School of Economics, SMU, Jul 2013 - Jun 2016

Project Director, Sim Kee Boon Institute for Financial Economics, SMU, Jul 2011 - Jun 2014 Program Director, I2XL Program, Executive Education, Oct 2019-Present

Principal Investigator, City-SMU Financial Literacy Program for Young Adults, August 2016-Present Program Director and Principal Investigator, Citi-SMU Financial Literacy Program for Young Adults, Jan 2020-Present

RESEARCH

Research Interests

Econometric Theory and Applications

Finance (Asset Pricing, Mutual Funds, Private Equity, Corporate Governance and Innovation)



Microeconomics Business Statistics

Research and Project Areas

Applied Microeconomics and Macroeconomics

Publications

Journal Articles [Refereed]

A smooth test for the equality of distributions, by BERA, Anil; GHOSH, Aurobindo; XIAO, Zhijie. (2013). *Econometric Theory, 29* (2), 419-446. https://doi.org/10.1017/S0266466612000370 (Published)

Journal Articles [Non-Refereed]

Inflation expectations in Singapore: A behavioural approach, by CLARK, Alexander; GHOSH, Aurobindo; HANES, Samuel. (2018). *Macroeconomic Review, 17* (1), 89-98. (Published)

Book Chapters

Neyman's smooth test and its applications in econometrics, by BERA, Anil K.; GHOSH, Aurobindo. (2002). In A. Ullah, A. T. K. Wan, and A. Chaturvedi (Ed.), *Handbook of applied econometrics and statistical inference* (pp. 170-230) New York: Marcel Dekker. https://doi.org/10.1201/9780203911075.pt3 (Published)

Conference Papers

Singapore Index of Inflation Expectations (SinDEx), by GHOSH Aurobindo, Financial Planning Round Table, Annual Finance Management Association Meeting, New Orleans, 2019

Game on: Effective Pedagogic Model for Increasing Financial Literacy, by GHOSH Aurobindo, Financial Planning Round Table, Annual Finance Management Association Meeting, New Orleans, 2019

Knowledge will set you free: Financial awareness and inclusion in the bottom of the pyramid, by GHOSH, Aurobindo (2018), Financial Planning Round Table, Annual Finance Management Association Meeting, San Diego, 2018

Knowledge will set you free: Financial awareness and inclusion in the bottom of the pyramid, by GHOSH, Aurobindo. (2017.0). *Indian Finance Conference 2017, December 20-22,* Bengaluru, India. (Presented)

Did the Sarbanes-Oxley act impede corporate innovation? An analysis of the unintended consequences of regulation, by CAO, Jerry; GHOSH, Aurobindo; GOH, Jeremy; TSCHANG, F. Ted. (2017.0). *Auckland Finance Meeting 2017, December 18-20,* Queenstown, New Zealand. (Presented)

Density forecast evaluation for dependent financial data: Theory and applications, by GHOSH, Aurobindo; BERA, Anil K. (2015.0). *China International Conference in Finance 2015, July 9-12,* Shenzhen. http://www.cicfconf.org/sites/default/files/paper_662.pdf (Published)

Rank Chasing: Do Fractiles of Returns Affect Mutual Fund Inflow Distribution?, by GHOSH, Aurobindo. (2007.0). *North America Summer Meetings of the Econometric Society*, (Presented)

A Semi-Parametric Two-Stage Projection Type Estimator of Multivalued Treatment Effects, by GHOSH, Aurobindo. (2007.0). *Far Eastern Meetings of the Econometric Society, Academia Sinica, Taipei, Taiwan,* (Presented)

Fractile Graphic Analysis and Non-Parametric Regression, by Ghosh, Aurobindo. (2006.0). *Far Eastern Meetings of the Econometric Society,* (Presented)

Fractile Graphical Analysis and Non-Parametric Regression: Some New Perspectives, by Ghosh, Aurobindo. (2006.0). *Econometric Society European Meetings*, (Presented)

Fractile Regression and Its Applications, by Ghosh, Aurobindo. (2006.0). 2006 North America Summer Meetings of Econometric Society, (Presented)

Rank Chasing: Do Fractiles of Return Distribution Affect Mutual Fund Inflow Distributions?, by GHOSH, Aurobindo. (2006.0). Nonparametric Methods session at the European Meetings of the ES, Vienna, Austria, 2006; In Empirical Finance session in the North America Summer Meetings of the ES, Duke Uni, Durham, N.C., USA, 2007(Presented)

Mahalanobis' Fractile Graphical Analysis: A Historical Account with Some New Perspectives, by GHOSH, Aurobindo. (2005.0). Second Singapore Econometric Study Group Meeting (July 8-9, 2005), (Presented)

Fractile Regression and Its Applications in Economics and Finance, by GHOSH, Aurobindo. (2005.0). *Presented at the Fifth Models and Methods in Economics (MME) Meetings at Indian Statistical Institute, Kolkata, India, December 28-30, 2005,* (Presented)

Mahalanobis' Fractile Graphical Analysis: A Historical Account with Some New Perspectives, by Ghosh, Aurobindo. (2004.0). Invited for Presentation at the International Conference on the Future of Statistical Theory, Practice and Education, Hyderabad, India, Dec 29, 2004-Jan 2, 2005; The Second Singapore Econometric Study Group Meeting, Jul 8-9, 2005, (29/12/2004: 01/01/200, (Presented)

Smooth Test of Density Forecast Evaluation with Independent and Serially Dependent Data, by GHOSH, Aurobindo. (2004.0). *Research Collection School Of Economics,* http://econpapers.repec.org/paper/ecmnasm04/319.htm (Published)

A Formal Test of Density Forecast Evaluation with Independent and Serially Dependent Data, by Ghosh, Aurobindo. (2004.0). North America Summer Meetings of the Econometric Society 2004, (Published)

A Formal Test of Density Forecast Evaluation with Independent and Serially Dependent Data, by Ghosh, Aurobindo. (2004.0). *International Symposium on Forecasting 2004,* (Published)

Smooth Test for Equality of Two Densities, by GHOSH, Aurobindo. (2004.0). *The European Econometric Society Meetings in Charles III University, Madrid, Spain (Aug 20-24); The FEMES, Seoul, South Korea (Jun 30-Jul 2); The Int'l Chinese Statistical Association Meetings, Spore, Jul 22-23, (Published)*

A Formal Test of Density Forecast Evaluation, by GHOSH, Aurobindo. (2002.0). *Nonlinear Models and Forecasting-Topic Contributed session of the Business and Economic Statistics Section, American Statistical Association Meetings, New York, 11-15 August 2002, New York.* (Published)

A Formal Test of Density Forecast Evaluation, by GHOSH, Aurobindo. (2002.0). *Time Series Methods* session of the International Indian Statistical Association Meeting, Northern Illinois University, Dekalb, Illinois, 14-16 June 2002, Dekalb, IL. (Published)

Testing Equality of Two Densities Using Neyman's Smooth Test, by GHOSH, Aurobindo. (2002.0).

Presented at the Midwest Econometric Group Meeting, Ohio State University, Columbus, Ohio, Oct 18-19, 2002; At the Tinbergen Institute, University of Amsterdam, Amsterdam, The Netherlands, Jan 23, 2003, (Published)

Working Papers

Reputation and strategies in business schools: The role of rankings and accreditations; ALVARADO, Gabriela; GHOSH, Aurobindo; THOMAS, et al.; 2018; Working Paper (Presented)

Governance Matter: Morningstar Stewardship Grades and Mutual Fund Performance, by CAO, Jerry; GHOSH, Aurobindo; GOH, Jeremy; NG, Wee Seng. (2014). (Presented)

Singapore Inflation Expectations: Expecting the Unexpected, by GHOSH, Aurobindo; YU, Jun. (2012). Singapore: MasterCard WorldWide Insights/SKBI Working Paper. (Published)

Grades Matter in Performance: Morningstar Stewardship Grades and Mutual Fund Performance, by GOH, Jeremy Choo Yong; GHOSH, Aurobindo; NG, Wee Seng. (2012). Singapore Scholar Symposium: (Presented)

Singapore consumer's inflation expectations and creation of Singapore Index of Inflation Expectations, by GHOSH, Aurobindo; YU, Jun. (2011). Singapore: MasterCard WorldWide Insights/SKBI Working Paper. (Published)

Risking returns: Moving from public to private equity, by GHOSH, Aurobindo. (2010). (Presented)

A semi-parametric two-stage projection type estimator of multivalued treatment effects, by GHOSH, Aurobindo. (2009). SSRN. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=971734 (Published)

Smooth test for density, by GHOSH, Aurobindo; BERA, Anil K. (2005). SSRN. http://doi.org/10.2139/ssrn.658861 (Published)

A formal test of density forecast evaluation, by BERA, Anil K.; GHOSH, Aurobindo. (2003). (Published)

Neyman's smooth test and its use in econometrics, by BERA, Anil K.; GHOSH, Aurobindo. (2001). SSRN. https://doi.org/10.2139/ssrn.272888 (Published)

Research Grants

Singapore Management University

Survival of the smartest: Robust Rank Regression for limited dependent variable, SMU Internal Grant, Ministry of Education (MOE) Tier 1, PI (Project Level): Aurobindo GHOSH, 2008, S\$25,183.33

RISK IN RETURNS: FROM PUBLIC TO PRIVATE EQUITY, SMU Internal Grant, Ministry of Education (MOE) Tier 1, PI (Project Level): Aurobindo GHOSH, 2007, S\$27,594.24

Fractile Treatment Effect, SMU Internal Grant, Ministry of Education (MOE) Tier 1, PI (Project Level): Aurobindo GHOSH, 2006, S\$27,198.4

Fractile Regression and Its Applications in Economics and Finance, SMU Internal Grant, Ministry of Education (MOE) Tier 1, PI (Project Level): Aurobindo GHOSH, 2005, S\$29,678.37

Inflation Expectations or Inflation of Expectations: Models and Bias Corrections, SMU Internal Grant, Ministry of Education (MOE) Tier 1, PI (Project Level): Aurobindo GHOSH, 2015, S\$30,000

Robust Tests And Methods In Evaluation Of Financial Risk: Can The Sharpe Ratio Make The Cut?, SMU Internal Grant, Ministry of Education (MOE) Tier 1, PI (Project Level): Aurobindo GHOSH, 2009, S\$22,841.65

Smooth Test for Density Forecast Evaluation for Indpendent and Serially Dependent Data with Applications in Finance and Economics, SMU Internal Grant, Ministry of Education (MOE) Tier 1, PI (Project Level): Aurobindo GHOSH, 2003, S\$31,598.33

Other Institutions

Index of Inflation Expectations (SInDEx) Survey, MAS, BIT and SMU Collaboration, MAS, PI (Programme Level): Aurobindo GHOSH, PI (Project Level): Aurobindo GHOSH, 2017, SGD30,000

Project Title "Project Proposal: Knowledge will set you free: Financial Awareness and Inclusion in the Bottom of the Pyramid", MasterCard program, MasterCard-SMU PI (Project Level): Aurobindo GHOSH, 2016, SGD35,000

"Bottom-up Financial Inclusion in ASEAN" (Continuation of "Knowledge will set you free"), MasterCard program, MasterCard-SMU PI (Project Level): Aurobindo GHOSH, 2016, SGD35,000

Development and Maintenance of Survey Based Leading Economic Indicators: The Singapore Index of Inflation Expectations (SInDEx), SKBI, SKBI PI (Project Level): Aurobindo GHOSH, 2008, SGD40,000

TEACHING

Courses Taught

Singapore Management University

Undergraduate Programmes :

Advanced Portfolio Management

Finance

Portfolio Management

Postgraduate Professional Programmes :

Advanced Quantitative and Economic Analysis

Applied Econometric Methods

Applied Econometric Methods Workshop

Corporate Finance

Econometrics I

Econometrics II

Empirical Finance I

Empirical Finance II

Teaching Publications

Cases

iCare benefits: Assisting low income retail consumers in Vietnam Part A & B, by THOMAS, Howard; GHOSH, Aurobindo; CHAN, Chi Wei. (2019). SMU-18-0031. https://cmp.smu.edu.sg/case/3836 (Published)

SureCash: Promoting financial inclusion in Bangladesh, by GHOSH, Aurobindo; BHATTACHARYA, Lipika. (2018). SMU-18-0014 [SureCash]. https://cmp.smu.edu.sg/case/3646 (Published)

Teaching Notes

iCare Benefits: Assisting Low Income Retail Consumers in Vietnam Part A & B, by THOMAS, Howard; GHOSH, Aurobindo; CHAN, CW.. (2019). SMU-18-0031. https://cmp.smu.edu.sg/case/3836 (Published)

SureCash: Promoting financial inclusion in Bangladesh, by GHOSH, Aurobindo; BHATTACHARYA, Lipika. (2018). SMU-18-0014. https://cmp.smu.edu.sg/case/3646 (Published)

Textbooks

Introductory statistics (2nd), by Chow, Hwee Kwan; Ghosh, Aurobindo; Leung, Denis H. Y.; TSE, Yiu Kuen. (2007). Singapore: Pearson/Prentice-Hall. http://www.worldcat.org/isbn/9789810677732 (Published)

THESES AND DISSERTATIONS

Theses and Dissertations Assessed

Singapore Management University

External Examiner, "Dispersion and Uncertainty in Density Forecasts: Evidence from Surveys of Professional Forecasters", Dissertation by LI, YOU, PhD in Economics, Singapore Management University, 2018

Committee Member, "Factors Driving Financial Inclusion and Financial Performance in Fintech New Ventures: An Empirical Study", Dissertation by MIGUEL ANGEL SORIANO, PhD in Business (General Management), Singapore Management University, 2018

Committee Member, "Essays on Corporate Finance", Dissertation by ZHOU SILI, PhD in Business (Finance), Singapore Management University, 2017

Committee Member, "Essays about Corporate Finance", Dissertation by YIWEI YU, PhD in Business (Finance), Singapore Management University, 2016

Committee Member, "Essays in Corporate Finance", Dissertation by LI BINGQIAO, PhD in Business (Finance), Singapore Management University, 2016

Committee Member, "Three Essays on Corporate Finance", Dissertation, PhD in Business (Finance), Singapore Management University, 2015

External Examiner, "Essays on High-frequency Financial Data Analysis", Dissertation by DONG YINGJIE, PhD in Economics, Singapore Management University, 2015

External Examiner, "Essays on High-frequency Financial Econometrics", Dissertation by LIU SHOUWEI, PhD in Economics, Singapore Management University, 2014

Committee Member, "Three Essays on Mutual Fund Ratings", Dissertation by NG WEE SENG, PhD in Business (Finance), Singapore Management University, 2013

Committee Member, "Empirical Corporate Finance, particularly Corporate Governance, Social Networks and Institutions", Dissertation by LEE YEN TEIK, PhD in Business (Finance), Singapore Management University, 2013

OTHER ACADEMIC AND PROFESSIONAL ACTIVITIES

Other Grants and Funding Received (Non-Research)

MyMoney@Campus at Polytechnics, MAS MoneySense and ABS, Jun 2018, S\$300,000

Asynchronous Learning and Quizzes with McGraw Hill Connect, President's Blended Learning Initiative, Aug 2017 - Dec 2017, S\$5,000

Presentation and Talks

Presentations

Fractile Graphical Analysis and Non-Parametric Regression in a New Perspective, (23 Jun 2018). North America Summer Meetings of the Econometric Society 2018, Davis, California. United States of America

Knowledge will set you free: Financial Awareness and Inclusion in the Bottom of the Pyramid, (27 Dec 2017). *Indian International Statistical Association Annual Conference 2017*, Hyderabad, India.

Knowledge will set you free: Financial Awareness and Inclusion in the Bottom of the Pyramid, (21 Dec 2017). *India Finance Conference (IFC) 2017,* Bangalore, India.

Did the Sarbanes-Oxley Act Impede Corporate Innovation? An analysis of the Unintended Consequences of Regulation, (18 Dec 2017). 2017 Auckland Finance Conference, Queenstown, New Zealand.

Media Contributions and Citations

Insight: Cost of Living: Tasty treats come at a price, Straits Times, 19 Aug 2018 https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2018/Aug2018/Aug20/20180 819-SUP-Insight-B04_B05-33x28-D.pdf Insight: Cost of Living, Straits Times, 19 Aug 2018 https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2018/Aug2018/Aug20/20180 819-SUP-Insight-B04-14x51-D.pdf

Singaporeans' Inflation Projections fall to 3.11%, Straits Times, 17 Jul 2018 https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2018/Jul2018/Jul17/2018071 7-STHM-Business-C03-5x36.pdf

Inflation expectations for next year down to 3.11% in June, Business Times, Lianhe Zaobao, Berita Herian, Belt and Road Online, MSN Online, Channel 8 Online,, Newspaper: Print and Online, 17 Jul 2018 https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2018/Jul2018/Jul17/2018071 6-MSN-News-Inflation.pdf

Insight on Consumer Price Index and Cost of Living Changes, Channel 8, 29 Jun 2018 https://www.channel8news.sg/news8/singapore/20180629-sg-food-price/4064884.html

Singaporeans expect higher prices amidst trade tensions, Singapore Business Review, Channel 8 News, 17 Apr 2018

https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2018/Apr2018/Apr17/201804 16-SBR-News-Singapore.pdf

Households here expect inflation to inch up to 2.97%: Poll, Straits Times, 17 Jan 2018 https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2018/Jan2018/Jan17/201801 17-STHM-Business-C02-5x39.pdf

Singaporeans expect prices to rise by 2.97%, yahoo.finance, Business Times Online, Lianhe Zaobao, Singapore Business Review Online, Channel 8 Online, International Business Times Online, MSN Online, Online and Print, 17 Jan 2018

https://sg.finance.yahoo.com/news/singaporeans-expect-prices-rise-2-014800672.html

Singaporeans' inflation expectations fall to 2.93% in September: SMU poll, The Business Times Online, yahoo.finance, Lianhe Zaobao, International Business Times Online, Singapore Business Review Online, Zaobao Online, Channel 8 Online, 17 Oct 2017

https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2017/Oct2017/Oct17/201710 16-BTOnline-Spore-Singaporeans.pdf

Singapore's inflation expectations moderate to 3.23%, Singapore Business Review, 24 Jul 2017 https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2017/Jul2017/Jul26/2017072 4-SBR-News-Singapore.pdf

Singaporeans predict inflation rate to slow down to 3.23%, Channel 8 Online, Shin Min Daily, 17 Jul 2017 https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2017/Jul2017/Jul18/2017071 7-C8-Finance-SMU.pdf

Singapores inflation expectations rise to two-year high of 3.38%, Lianhe Zaobao, Channel 8 Online, 25 Apr 2017

https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2017/Apr2017/Apr25/LHZB_20170425_1.pdf

Inflation expectations rise to 2.7%: SMU survey, Business Times, yahoo.finance, Lianhe Zaobao, Channel 8 Online, Nanyang Online, Singapore Business Review, Capital 95.8, Berita Hariwan, print and online coverage, 16 Jan 2017

https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2017/Jan2017/Jan17/ST_20 170117_1.pdf

Consumers expect inflation to rise: Survey, Straits Times, 16 Jan 2017

https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2017/Jan2017/Jan17/ST_20 170117_1.pdf

Where are the BARGAINS?, The Edge, 16 Jan 2017 https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2017/Jan2017/Jan17/TheEd ge_20170113_1.pdf

Singaporeans' inflation expectations remain at record 5-year lows: SInDEx, Business Times, Straits Times Online, yahoo online, Lianhe Zaobao, Singapore Business Review, Chennel 8 Online, Berita Herian,Mofcom, print and online coverage, 17 Oct 2016 https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2016/Oct2016/Oct18/BTO_2 0161017_A.pdf

S'pore inflation expectation hits a 5-year low, Business Times, yahoo news, intellasia, Lianhe Zao Bao, Shin Chew Daily, Channel 8, 18 Jul 2016 https://www.smu.edu.sg/sites/default/files/smu/news_room/smu_in_the_news/2016/Jul2016/Jul2016/Jul29/BT_2016 0719_2.pdf

UNIVERSITY SERVICE

Singapore Management University

MasterCard Fellow, MasterCard Program for Financial and Social Inclusion, Oct 2017

Principal Investigator, Citi FinLit Program for Young Adults, Sep 2017

MasterCard Fellow, PI for Citi FinIIt program, Citi FinLit Program for Young Adults, MasterCard Program, Aug 2017

Faculty Senate Secretary, Faculty Senate, Aug 2017 - Mar 2018

Committee Member, Assurance of Learning Committee, Jul 2017 - Jun 2019

Committee Member, Faculty Senate Executive Committee, Nov 2016 - Mar 2018

Trainer, Citi FinLit Program, Oct 2016 - Present

Faculty Advisor, LKCSB Academic Counsellers, Jul 2016 - Present

Faculty Advisor, Other, Jul 2016

Faculty Liaison, Vietnam National University (VNU), Jun 2016

Committee Chair, Senate Benefits (BeWell) Committee, Senate Program Committee, Apr 2016 - Mar 2018

University Senate Service, Faculty Senate, Apr 2016 - Mar 2018

University Senate Service, Faculty Senate, Jan 2013 - Mar 2016

EXTERNAL SERVICE PROFESSIONAL

Session Chair, North America Summer Meetings of the Econometric Society 2018, 2018 Session Chair, Conference Session Organizer and Chair, IISA, 2017 Panel Chair, Session on Innovation, 2017 Auckland Finance Meeting, 2017

Committee Member, FMA Europe Program Committee, Financial Management Association (FMA), 2012 Present

Member, Advisory Board, Agility Research and Strategy, 2012 - Present

Associate Editor, Editorial Board, Indian Growth and Development Review (IGDR), 2008 - 2014

Ad hoc Referee, Journal of Econometrics, Journal of the American Statistical Association (JASA), International Journal of Forecasting, Singapore Economic Review (SER). Indian Growth and Development Review, Journal of Banking and Finance, Empirical Economics, International Review of Finance, Sanhkya, etc., 2003 - Present

EXTERNAL SERVICE PUBLIC SECTOR AND COMMUNITY SERVICE

Faculty Advisor, MyMoney@Campus Organizing Committee, MAS MoneySense and ABS, 2018, 2019