Shuping Shi
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Short Biography

Shuping Shi is a Professor at Macquarie University. She joined Macquarie University as a Senior Lecturer in 2014, and her previous position was with the Australian National University as a Lecturer (2011 – 2014).

Shi is an econometrician with a theoretically grounded and policy-relevant research agenda in the field of Financial Econometrics and Applied Economics. She has published in top-tier academic journals, including the *Journal of Econometrics*, *International Economic Review*, *Econometric Theory*, *Journal of Financial Econometrics*, and *Journal of Time Series Analysis*. She is also one of the developers of the PSY technique, a real-time bubble monitoring technique used by many institutions (e.g., the Federal Reserve Bank of Dallas, Clinton Group, Hong Kong Monetary Authority, De Nederlandsche Bank, Central Bank of Colombia). The total number of citations of her journal articles since 2014 is over 1,000 (Google scholar as at June 2019).

Shi has attracted a number of significant external fundings (over $1 million) over the past 5 years, including the Australian Research Council *Discovery Early Career Researcher Award* (2019-2021) and two Australian Research Council *Discovery Project* Awards (2015-2018 and 2019-2021).

Education

- Ph.D. in Economics, The Australian National University, 2011
- Master in Economics (by Research), Singapore Management University, 2007
- Bachelor of Management (real estate), Zhongnan University of Economics & Law, 2005

Employment History

- Sep 2019 – Present Professor, Department of Economics, Macquarie University
- Dec 2016 – Sep 2019 Associate Professor, Department of Economics, Macquarie University
- Mar-May 2017 Visiting Scholar, Singapore Management University
- Feb-Mar 2017 Visiting Scholar, Federal Reserve Bank of St. Louis
- Feb 2014 – Dec 2016 Senior Lecturer, Department of Economics, Macquarie University
- Feb 2011 – Jan 2014 Lecturer, Research School of Finance, Actuarial Studies and Applied Statistics, Australian National University
- 2009 - 2010 Tutor, Research School of Economics, Australian National University
- Apr – Jul 2007 Internship, Prudential Asset Management (Singapore), fixed income group

Referred Journal Publications

1. Laurent, S. and Shi, S. (Accepted in May 2019). Volatility Estimation and Jump Detection for Drift-diffusion Process, ***Journal of Econometrics***. [ABDC ranking: A*] [Quartiles: Q1] [SJR: 4.485] [JIF: 2.226]

2. Phillips, P. and Shi, S. (Accepted in April 2019). Detecting Financial Collapse and Ballooning Sovereign Risk, ***Oxford Bulletin of Economics and Statistics*****.** [ABDC ranking: A] [Quartiles: Q1] [SJR: 1.172] [JIF: 1.200]

3. Shi, S., Hurn, S., and Phillips, P. (Accepted in January 2019) Causal Change Detection in Possibly Integrated Systems: Revisiting the Money-Income Relationship, ***Journal of Financial Econometrics***. [ABDC ranking: A] [Quartiles: Q1] [SJR: 2.282] [JIF: 1.222]

4. Dungey, M., Hurn, S., Shi, S., and Volkov, V. (2019). Information Flow in Times of Crisis: The Case of the European Banking and Sovereign Sectors, **Econometrics** (*Special Issue Celebrated Econometricians: Peter Phillips*), *7*(1), 5. [ABDC ranking: B] [Quartiles: Q3]

5. Milunovich, G., Shi, S., and Tan, D. (2019). Bubble Detection and Sector Trading in Real Time, **Quantitative Finance**, 19(2): 247-263. [ABDC ranking: A] [Quartiles: Q1] [SJR: 0.769] [JIF: 1.528]

6. Shi, S., Phillips, P., and Hurn, S. (2018). Change Detection and the Causal Impact of the Yield Curve, **Journal of Time Series Analysis**, 39: 966-987. [ABDC ranking: A] [Quartiles: Q1] [SJR: 1.189] [JIF: 1.106]
7. Phillips, P., and Shi, S. (2018). Financial Bubble Implosion and Reverse Regression, **Econometric Theory**, 34: 705-753. [ABDC ranking: A*] [Quartiles: Q1] [SJR: 2.810] [JIF: 1.314]
8. Clements, A., Hurn, S., and Shi, S. (2017). An Empirical Investigation of Herding in the U.S. Stock Market, **Economic Modelling**, 67: 184-192. [ABDC ranking: A] [Quartiles: Q2] [SJR: 1.039] [JIF: 2.360]
9. Shi, S. (2017). Speculative Bubbles or Market Fundamentals? An Investigation of US Regional Housing Markets, **Economic Modelling**, 66: 101-111. [ABDC ranking: A] [Quartiles: Q2] [SJR: 1.039] [JIF: 2.360]
10. Deng, Y., Girardin, E., Joyeux, R. and Shi, S. (2017). Did Bubbles Migrate from the Stock Market to the Housing Market in China between 2005 and 2010? **Pacific Economic Review**, 22: 276-292. [ABDC ranking: B] [Quartiles: Q3] [SJR: 0.279] [JIF: 0.612]
11. Shi, S., Valadkhani, A., Smyth, R. and Vahid, F. (2016). Dating the Timeline of House Price Bubbles in Australian Capital Cities, **Economic Record,** 92: 590–605. [ABDC ranking: A] [Quartiles: Q3] [SJR: 0.348] [JIF: 0.648]
12. Arora, V. and Shi, S. (2016) Energy Consumption and Economic Growth in the United States, **Applied Economics**, 48: 3763 – 3773. [ABDC ranking: A] [Quartiles: Q2] [SJR: 0.499] [JIF: 1.124]
13. Arora, V. and Shi, S. (2016). Nonlinearities and Tests of Asset Price Bubbles, **Empirical Economics**, 50: 1421 – 1433. [ABDC ranking: A] [Quartiles: Q2] [SJR: 0.567] [JIF: 1.179]
14. Shi, S., & Song, Y. (2015). Identifying Speculative Bubbles with an Infinite Hidden Markov Model, **Journal of Financial Econometrics,** 14: 159 – 184. [ABDC ranking: A] [Quartiles: Q1] [SJR: 2.282] [JIF: 1.222]
15. Phillips, P., Shi, S., and Yu, J. (2015). Testing for Multiple Bubbles: Historical Episodes of Exuberance and Collapse in the S&P 500. **International Economic Review**, 56, 1043 – 1078 (Lead article). [ABDC ranking: A*] [Quartiles: Q1] [SJR: 4.376] [JIF: 1.539]
16. Phillips, P., Shi, S., & Yu, J. (2015). Testing for Multiple Bubbles: Limit Theory of Dating Algorithms, **International Economic Review**, 56, 1079 – 1134.). [ABDC ranking: A*] [Quartiles: Q1] [SJR: 4.376] [JIF: 1.539]
17. Phillips, P., Shi, S., & Yu, J. (2014). Specification Sensitivity in Right-tailed Unit Root Testing for Explosive Behaviour. **Oxford Bulletin of Economics and Statistics**, 76, 315 – 333. [ABDC ranking: A] [Quartiles: Q1] [SJR: 1.172] [JIF: 1.200]
18. Shi, S. (2013). Specification Sensitivities in the Markov-switching Unit Root Test for Bubbles. **Empirical Economics**, 45, 697-713. [ABDC ranking: A] [Quartiles: Q2] [SJR: 0.567] [JIF: 1.179]
19. Arora, V., Gomis-Porqueras, P., & Shi, S. (2013). The Divergence between Core and Headline Inflation: Implications for Consumer's Inflation Expectations. **Journal of Macroeconomics**, 38 (Part B), 497-504. [ABDC ranking: A] [Quartiles: Q2] [SJR: 0.680] [JIF: 1.075]
20. Shi, S. & Arora, V. (2012). An Application of Models of Speculative Behaviour to Oil Prices. **Economics Letters**, 115, 469-472. [ABDC ranking: A] [Quartiles: Q2] [SJR: 0.767] [JIF: 1.060]

Book Chapters and Other Publications

21. Phillips, P., and Shi, S. (forthcoming). Real Time Monitoring of Asset Markets: Bubbles and Crises, In Hrishikesh D. Vinod and C.R. Rao (Eds.), ***Handbook of Statistics***, Volume 41 - Econometrics Using R.
22. Girardin, E., Joyeux, R., and Shi, S. (2018). Stock market bubble migration: From Shanghai to Hong Kong, Jawadi, F. (ed) ***Uncertainty, Expectations and Asset Price Dynamics: Essays in the Honor of Georges Prat***, Springer, 24: 173-192.

23. Phillips, P. C. B., Shi, S., Caspi, I. (2018). psymonitor: Real-Time Monitoring of Asset Markets with R. **R Foundation for Statistical Computing**, Vienna, Austria.URL https://CRAN.R-project.org/package=psymonitor.

Working Papers and Work in Progress

24. Shi, S. and Wang, B. (2018). Systemic Risk in Housing Markets, revise and resubmission.
25. Laurent, S. and Shi, S. (2019). Unit Root Testing with High-Frequency Data, submitted.
26. Shi, S., Rahman, A., and Wang, B. (2019). Australian Housing Market Booms: Fundamentals or Speculation? submitted.
27. Chen, Y., Phillips, P., and Shi, S. (2019). Detecting Common Bubbles in a Large-Dimensional Financial System.

Research Grants

1. *Discovery Early Career Researcher Award* (2019-2021) from the Australian Research Council ($375,000). Title of research: "Monitoring financial bubbles using high-frequency data".
2. *Discovery Project* Research grant (2019-2021) from the Australian Research Council ($220,000) with Roselyne Joyeux, George Milunovich, Ben Wang, Yongheng Deng, and Jing Wu. Title of research: "Measuring uncertainty in global housing markets and its risk to Australia".
3. *Discovery Project* Research grant (2015-2018) from the Australian Research Council ($404,700) with Stan Hurn, Peter C.B. Phillips, and Mardi Dungey. Title of research: "Change Detection in Causal Relationships and Measurement of Systemic Risk".
4. *Research Starter grant* (2014-2015) from the Faculty of Business and Economics, Macquarie University ($3,527). Title of research: "Bubbles or Market Fundamental?"
5. *Research School grant* (2011-2012) from the College of Business and Economics, The Australian National University ($7,000). Title of Research: "Econometric Techniques for Monitoring Financial Exuberance."
6. *Research grant* (2011) from the National Computational Infrastructure. Title of research: "Bootstrapping Markov-Switching Models".
7. *Research Start-up grant* from the Research School of Finance, Actuarial Studies, and Applied Statistic, The Australian National University ($10,000).
8. 2009 *Vice-Chancellor's Higher Degree Research Travel Grant*. Amount Awarded: $1,500
9. 2009 *FIRN Exchange Program Scholarship* to Singapore Management University. Project Title: Econometric Methods for Date-Stamping Financial Bubbles. Amount Awarded: $3,040
10. 2009 *Travel Scholarship from FIRN* to attend the Workshop on "Time Series Econometrics".
11. 2009 *Travel Scholarship from the Economic Design Network* to attend their annual Winter School on "Money and Pricing".
12. 2008 & 2009 *Travel Scholarship from Financial Integrity Research Network* (FIRN) to attend their Master Class on "Market Micro-structure, Asset Pricing, Banking and Financial Regulation, Behavioral Finance and Stochastic Volatility".

Selected Conference and Seminar Presentations

2019 The Annual Meeting of Young Econometricians in Asia Pacific, Melbourne University (**invited**); Quantitative Finance and Financial Econometrics (**invited**); Financial Econometrics and New Finance Conference (**invited**); Symposium on Financial Time Series in Honor of Jun Yu (**invited**); Deakin University (**invited**)

2018 The Annual Meeting of Young Econometricians in Asia Pacific; Australian and New Zealand Econometric Study Group Meeting; International Symposium on Econometric Theory and Applications; the Hu-HUE-SMU Tripartite Conference on Econometrics (**invited**); Frontier in Econometrics (**organiser**); Time Series & Forecasting Symposium (**invited**); Monash University (**invited**)

2017 Federal Reserve Bank of St. Louis (**invited**); the Hu-HUE-SMU Tripartite Conference on Econometrics (**invited**); Melbourne University (**invited**); Sydney Econometric Research Group Meeting (**invited**)

2016 J.P. Morgan Quantference (**invited**); The Risk Day Conference (**invited**); The Australian National University(**invited**); Australasia Meeting of the Econometric Society; University of Tasmania(**invited**); Sydney Econometric Research Group Meeting (**invited**)

2015 The Sydney Econometrics Research Group Meeting (**invited**); The Center for Research in Economics and Statistics (**invited**); Annual conference of the International Association for Applied Econometrics; Sydney University(**invited**); New Zealand Econometrics Study Group Meeting

2014 Princeton/QUT/SMU Tripartite Conference on Financial Econometrics(**invited**); Asian Meeting of Econometric Society (**invited**); China Meeting of Econometric Society (**invited**); New Zealand Econometrics Study Group Meeting

2013 Econometric Society Australasian Meeting; Queensland University of Technology, Macquarie University, Reserve Bank of New Zealand

2012 Conference on Commodity Price Volatility, Past and Present (**invited**); Heterogeneous Agent Modeling Research Group

2011 Econometric Society Australasian Meeting; The Monetary Authority of Singapore (**invited**); SMU-ESSEC Symposium on Empirical Finance and Financial Econometrics (**invited**); 7th International Symposium on Econometric Theory and Applications; 19th Symposium of the Society for Nonlinear Dynamics and Econometrics

2010 PhD Conference in Economics and Business; Workshop on Finance and the Macroeconomy; The University of New South Wales (**invited**); University of Technology Sydney (**invited**); Singapore Management University (**invited**); International Conference on Computing in Economics and Finance; International Symposium on Econometric Theory and Applications; Singapore Management University (**invited**)

2009 The FIRN Doctoral Tutorial, Sydney; the Australasian Meeting of the Econometric Society

Editorial Activities

I act as an ad-hoc referee for the following journals: *International Economics Review, Review of Economics and Statistics, Econometric Theory, Econometric Reviews, Journal of Time Series Econometrics, Oxford Bulletin of Economics and Statistics, Journal of Financial Econometrics, Journal of Banking and Finance, Journal of Money Credit and Banking, Statistical Surveys, Econometric Review, Journal of Housing Economics, Macroeconomic Dynamics, Economic Letters, Australian Economic Review, Journal of Economic Dynamics and Control, Empirical Economics, Energy Economic,* and *American Journal of Agricultural Economics.*

Professional/University Service

1. Selection committee, Lecture/Senior Lecturer (Teaching and Leadership), Macquarie University, 2019
2. Member, Program Committee, International Association of Applied Econometrics, 2019
3. Expert Assessor, the Australian Research Council, 2017-2019
4. Co-organizer, Frontier in Econometrics workshop, July 2018
5. Mentor, Research Planning and Group Mentoring Scheme, Faculty of Business and Economics (FBE), Macquarie University, 2018-2019
6. Member, University Grant Review Panel, New Staff and Restart Grant, Macquarie University, 2017-2019
7. Member, Workload Working Party, FBE, Macquarie University, 2018
8. Member, Faculty Grant Review Panel, FBE, Macquarie University, 2015-2019
9. Organizer, Lighthouse Talk by Sebastien Laurent, Macquarie University, 2018
10. Co-organizer, Econometric Workshop by Helmut Lütkepohl, 2015
11. Co-organizer, Financial Econometrics Workshop, FBE, Macquarie University, 2014

Awards

1. 2017 - 2018 Publon Top Reviewers in Economics, Econometrics and Finance
2. 2015 Faculty Learning and Teaching Award, Faculty of Business and Economics, Macquarie University
3. 2014 Early Career Research Excellence Award, Faculty of Business and Economics, Macquarie University
4. 2011 Summer Camp Best Paper Award, the College of Business and Economics, the Australian National University. Paper Title: Testing for Multiple Bubbles.
5. 2009 FIRN Best Paper Award. Paper Title: Testing for Periodically Collapsing Bubbles: A Generalized SUP ADF Test. Amount Awarded: $3,500
6. 2005 Awarded Excellent Undergraduate Thesis of Hubei Province, China

Courses Taught

1. Financial Econometrics, Macquarie University
2. Econometrics and Business Statistics, Macquarie University
3. Applied Time Series Analysis, The Australian National University
4. Financial Statistics, The Australian National University
5. Valuation, Strategy and Structure, The Australian National University

HDR Supervision

Master by Research Students (completed):

1. Arafat Rahman: *Speculative Bubble Detection in Australian Housing Markets*
2. Qiuyue Zhang: *Energy Prices and Economic Activity in the US*
3. Vidhi Nandini: *Forecasting Exchange Rate Based on Macroeconomic Variables: GVAR Approach*
4. Shangnian Jiang: *Asymmetric Monetary Policy in Australia*

Ph.D. students (ongoing): Arafat Rahman