

# **2023** Symposium on Economics and Finance in the Asia-Pacific (The 9<sup>th</sup> Hanyang-Kobe-Nanyang Extended Conference)

**Date:** November 28-29, 2023

Host: Nanyang Technological University (NTU), Singapore

# **Programme**

## Day 1 (November 28, Tuesday)

## 8:50-9:00 Opening Remarks

Venue: HIVE Level 3, LHS-TR+56

Speaker: Qu FENG, Head of Economics Division, NTU

## 9:00-9:45 Keynote Speech 1

Venue: HIVE Level 3, LHS-TR+56 Speaker: Xiaobo ZHANG (Peking U)

Title: Bridging the Gender Gap in Entrepreneurship and Empowering Women via

Digital Technologies

Chair: Guiying Laura WU (NTU)

## 9:45-10:00 Coffee Break

#### 10:00-11:30 Plenary Session 1

(30 minutes for each presentation)

## **Session 1: Banking and Finance**

Venue: HIVE Level 3, LHS-TR+56

Chair: Ryuzo MIYAO, Dean of the Graduate School of Economics and Faculty of

Economics, Kobe U

Presentation 1: The Cost of Capital Market Distortions: Evidence from Chinese

Overseas IPO

Presenter: Guiying Laura WU (NTU)

Presentation 2: Is There an Optimal Risk-Taking in U.S. Banks?

Presenter: Ji-Chai LIN (National Central U)

Presentation 3: State-based Overconfidence: An Application to the Credit Market

Presenter: Thomas VOON (Lingnan U)

## 11:30-11:40 Coffee Break

## 11:40-12:40 Semi-Plenary Session 1

(30 minutes for each presentation)

#### **Session 2: Macroeconomics**

Venue: HIVE Level 3, LHS-TR+56 Chair: Young Jun CHUN (Hanyang U)

Presentation 1: The Ramsey Steady State Conundrum in Heterogeneous Agent

Economy

Presenter: Yi WEN (Shanghai Jiao Tong U)

Presentation 2: A Schumpeterian Exploration of Gini and Top/Bottom Income Shares

Presenter: Tetsugen HARUYAMA (Kobe U)

#### **Session 3: Econometrics**

Venue: HIVE Level 3, LHS-TR+55

Chair: Wenjie WANG (NTU)

Presentation 1: Inference in Time Series Models Using Smoothed Clustered Standard

Errors

Presenter: Seunghwa RHO (Hanyang U)

Presentation 2: Unified Inference for Long-Horizon Predictive Regressions Including

Mildly Integrated and Explosive Cases Presenter: Seok Young HONG (NTU)

## **12:40-12:50 Welcome Speech**

Venue: HIVE Level 3, LHS-TR+56

Speaker: Euston QUAH, Albert Winsemius Chair Professor of Economics, Director of Economic Growth Centre, NTU, & the President of Economic Society of Singapore,

Editor of *Singapore Economic Review* 

#### 12:50-13:40 Buffet Lunch

Venue: HIVE Level 3

## 13:40-14:25 Keynote Speech 2

Venue: HIVE Level 3, LHS-TR+56 Speaker: Sumit AGARWAL (NUS)

Title: Water Conservation and Household Sustainability in Singapore

Chair: Qu FENG (NTU)

## 14:25-14:40 Coffee Break

## 14:40-15:40 Semi-Plenary Session 2

(30 minutes for each presentation)

## **Session 4: Development Economics**

Venue: HIVE Level 3, LHS-TR+56

Chair: Shigeto KITANO, Director of Research Institute for Economics & Business

Administration, Kobe U

Presentation 1: Cultivating Equality: The Effect of Traditional Farming Practices on

Gender Disparity in China Presenter: James ANG (NTU)

Presentation 2: Risk Sharing and Peer Effects in Gift Spending: Evidence from Rural

China

Presenter: Juncong GUO (Shanghai Jiao Tong U)

#### **Session 5: Microeconomics**

Venue: HIVE Level 3, LHS-TR+55

Chair: Tat-How TEH (NTU)

Presentation 1: Persuasion under the Influence of Fake News

Presenter: Daeyoung JEONG (Hanyang U)

Presentation 2: A Simple Approach for Measuring Higher-Order Risk Attitudes

Presenter: Rachel J. HUANG (National Central U)

#### **15:40-15:50 Coffee Break**

#### **15:50-17:20 Plenary Session 2**

(30 minutes for each presentation)

#### **Session 6: Empirical Economics and Finance**

Venue: HIVE Level 3, LHS-TR+56

Chair: Henry H. HUANG (National Central U)

Presentation 1: Transitioning from a Bank towards an Equity-Outsider Financing

System in Japan: The Impact on Income Smoothing Practice over 40 Years

Presenter: Keishi FUJIYAMA (Kobe U)

Presentation 2: Big-Box Store Expansion and Consumer Welfare

Presenter: Zhonglin LI (NUS)

Presentation 3: Information Disclosure and Locations Choices: A Study of the

Marcellus Shale

Presenter: Wenshu GUO (Lingnan U)

## **17:20-17:40 Closing Remarks**

Venue: HIVE Level 3, LHS-TR+56

Closing Speech: Yohanes Eko RIYANTO, Chair of School of Social Sciences, NTU

## Concluding Remarks:

Shigeto KITANO, Director of Research Institute for Economics & Business

Administration, Kobe U

Young Jun CHUN, Professor, Hanyang U

Yi WEN, Distinguished Professor, Shanghai Jiao Tong U

Henry H. HUANG, Chair, Department of Finance, National Central U

#### 18:30-20:00 Dinner

Venue: Captain's Table Chinese Restaurant, Raffles Marina

## Day 2 (November 29, Wednesday)

## 9:00-11:00 Special Session for PhD Students

(30 minutes for each presentation) Chair: Wenjie WANG (NTU)

Zoom Link: https://ntu-

sg.zoom.us/j/88164278622?pwd=Z1hBYU5VbXNpclIzeXM4cEZhQWQvUT09

Zoom Number: 881 6427 8622

Password: 123456

Presentation 1: Identifying Growth Effect of Internet Penetration

Presenter: Mengyuan CAI (NTU)

Presentation 2: Why Some People Can't Convey Their True Thoughts?

Presenter: Xiaoping ZHAO (Kobe U)

Presentation 3: Power of Forward Guidance when Preferences are Quasi-Hyperbolic

Presenter: Hyeongjin CHOI (Hanyang U)

Presentation 4: Carbon Tax Aversion and Macroeconomic Effects

Presenter: Liuyang SHE (NTU)

#### **Local Hosts:**

Economics Division & Economic Growth Centre

School of Social Sciences, Nanyang Technological University, Singapore

## **Programme Committee:**

Qu FENG (local organizer), Nanyang Technological University, Singapore

Wenjie WANG (local organizer), Nanyang Technological University, Singapore

Junyi SHEN, Kobe University, Kobe

Songman KANG, Hanyang University, Seoul

Xi QU, Shanghai Jiao Tong University, Shanghai

Henry Hongren HUANG, National Central University, Taipei

Fuhai HONG, Lingnan University, Hong Kong

#### **Local Contact and Assistant:**

Ms. Yue HAN, Nanyang Technological University, Singapore

Email: yue.han@ntu.edu.sg

## Participants and Guests (in alphabet order):

Sumit AGARWAL, National University of Singapore, Singapore

James ANG, Nanyang Technological University, Singapore

Yeow Hwee CHUA, Nanyang Technological University, Singapore

Young Jun CHUN, Hanyang University, Seoul

Qu FENG, Nanyang Technological University, Singapore

Keishi FUJIYAMA, Kobe University, Kobe

Juncong GUO, Shanghai Jiao Tong University, Shanghai

Wenshu GUO, Lingnan University, Hong Kong

Tetsugen HARUYAMA, Kobe University, Kobe

Seok Young HONG, Nanyang Technological University, Singapore

Henry Hongren HUANG, National Central University, Taipei

Rachel Juiching HUANG, National Central University, Taipei

Daeyoung JEONG, Hanyang University, Seoul

Shigeto KITANO, Kobe University, Kobe

Zhonglin LI, National University of Singapore, Singapore

Ji-Chai LIN, National Central University, Taipei

Ling LIN, EGC Visiting Scholar, Singapore

Ryuzo MIYAO, Kobe University, Kobe

Yu QIN, National University of Singapore, Singapore

Euston QUAH, Nanyang Technological University, Singapore

Seunghwa RHO, Hanyang University, Seoul

Yohanes Eko RIYANTO, Nanyang Technological University, Singapore

Akshar SAXENA, Nanyang Technological University, Singapore

Swati SHARMA, Nanyang Technological University, Singapore

Tat-How TEH, Nanyang Technological University, Singapore

Thomas VOON, Lingnan University, Hong Kong

Wenjie WANG, Nanyang Technological University, Singapore

Yi WEN, Shanghai Jiao Tong University, Shanghai

Guiying Laura WU, Nanyang Technological University, Singapore

Guangzhi YE, Nanyang Technological University, Singapore

Zhaoneng YUAN, Nanyang Technological University, Singapore

Xiaobo ZHANG, Peking University, Peking

## **Introduction of Speakers and Abstracts**

## **Keynote Speech 1**

## Xiaobo ZHANG (Peking U)

#### Bio:

Xiaobo Zhang is a chair professor of economics at Guanghua School of Management at Peking University and senior fellow of IFPRI. He received his Ph.D. from Cornell University. His main interests are development economics and Chinese economy. He received Sun Yefang Prize for Economics Research in China and Zhang Peigang Development Economics Outstanding Achievement Award. He is a co-PI of China Family Panel Studies (CFPS) survey, PI of Enterprise Survey for Innovation and Entrepreneurship in China (ESIEC), and PI of Quarterly Online Survey on Micro-and-small Enterprises (OSOME) in China. He is the Chief Editor of *China Economic Review*.



**Title:** Bridging the Gender Gap in Entrepreneurship and Empowering Women via Digital Technologies

#### **Abstract:**

Female entrepreneurs are underrepresented in many developed and developing countries for various cultural, historical, and economic reasons. Using primarily collected online and offline enterprise surveys, universal business registration records, and transactions from a world leading e-commerce platform, we document a gender gap in entrepreneurship in China and investigate whether digitization reduces it. Specifically, we show that the expansion of e-commerce and digital marketplaces mitigates constraints faced by female entrepreneurs and business owners by enabling work flexibility, lowering working capital requirements, and drastically amplifying the distributional channels of their companies. Consequently, female entrepreneurial entry and performance improve, both in absolute terms and relative to men. Moreover, against the backdrop of the COVID-19 pandemic, women are more likely to adopt e-commerce and other digital technologies, with implications for long-term business operations, performance, and resilience.

## **Keynote Speech 2**

## **Sumit AGARWAL (NUS)**

## Bio:

Sumit Agarwal is Low Tuck Kwong Distinguished Professor of Finance at the Business School and a Professor of Economics and Real Estate at the National University of Singapore. He is the Managing Director of Sustainable and Green Finance Institute at NUS. He is also the President of Asian Bureau of Finance and Economic Research. Sumit's research interests include issues relating to household sustainability, financial institutions, household finance, behavioural finance, and real estate markets. He has published over one hundred and twenty-five research articles in economics and finance journals among others.



Title: Water Conservation and Household Sustainability in Singapore

## **Plenary Session 1**

## **Session 1: Banking and Finance**

## **Guiying Laura WU (NTU)**

## Bio:

Guiying Laura Wu is an Associate Professor in Economics from School of Social Sciences at Nanyang Technological University, Singapore. Her research centres on the effects of various distortions and frictions on firms' investment and financing behaviour and their implications to economic development and resource allocation. She is currently working on two research projects: first, the causes and consequences of overseas listing by Chinese firms; and second, the effect of digital infrastructure on firms' technology adoption and productivity. Her research has been published in leading economics journals such as *Journal of Development Economics*, *Journal of Economic Behaviour and Organization*, and *Journal of International Economics*. She serves as an Associate Editor for *Economic Modelling* and *Singapore Economic Review*.



Title: The Cost of Capital Market Distortions: Evidence from Chinese Overseas IPO

#### **Abstract:**

Both cross-border capital controls and behind-the-border capital market regulations impose a cost on firms. We propose a willingness-to-pay approach to estimate the overall cost from the viewpoint of entrepreneurs, by comparing Chinese firms listed at home and abroad, that takes into account the endogenous nature of the IPO locational choices. The estimated cost is sizable – equivalent to a haircut in firm value by over 50% - and varies systematically with the tightness of either the capital controls or domestic regulations. We also find that the overseas listings exhibit a positive selection – they are better on average than their domestically listed counterparts.

## Ji-Chai LIN (National Central U)

#### Bio:

Dr. JC Lin is a Finance professor at National Central University in Taiwan. Before joining NCU, he was Chair Professor of Finance and Christina Lee Professor in Accounting and Finance at Hong Kong PolyU since 2015. Before that, he was the holder of Lloyd F. Collette Endowed Chair of Financial Services and Professor of Finance at Louisiana State University. He obtained his Ph.D. from the University of Iowa in 1988. Dr. Lin has given lectures at universities in the U.S., U.K., Finland, China, Hong Kong and Taiwan, and won awards in teaching and research. He has a broad range of research interests and has published his research work in prestigious academic journals in the finance and accounting disciplines, including the *Journal of Finance*, *Journal of Financial Economics*, *Review of Financial Studies*, *Accounting Review*, *Journal of Financial and Quantitative* 



Analysis, Journal of Corporate Finance, Financial Management, Journal of Financial Markets, and Journal of Banking and Finance.

**Title:** Is There an Optimal Risk-Taking in U.S. Banks?

#### **Abstract:**

Banks should possess flexibility in adjusting their risk-taking since high liquidity of financial assets allows banks to change their asset portfolios and risk exposures easily. To obtain higher returns, banks have incentives to take more risks. However, to abate financial distress, which is costly, and to attract deposits, a low-cost source of funding, banks need to curtail excessive risk-taking. This paper addresses two fundamental yet crucial questions: Is there an optimal level of risk-taking, which allows banks to determine excess risk and insufficient risk-taking? How promptly do banks rectify their risk-taking and align their risk levels with the target? We propose two partial risk adjustment mechanisms, one for individual banks' deviations from the norm (tracking cross-sectional variations), and the other one for the whole banking sector (tracking time-series variations). Analyzing U.S. banks' earnings volatility, we find that U.S. banks appear to operate with an optimal risk level, approximately aligned with the grand mean, and that, on average, U.S. banks correct about one quarter of their risk deviations annually and, in the long run, they fully align their risk levels with the target risk level. Notably, the adjustment process for over risk-taking occurs at a faster pace compared to under risk-taking, implying that excessive risk-taking carries higher costs. Most of the sector's risk adjustment occurs during the financial crisis through write-offs.

## Thomas VOON (Lingnan U)

#### Bio:

Prof Voon is an associate professor of economics at the Dept of Economics, Lingnan University Hong Kong. He specializes in Public Finance, corporate finance, Agricultural Economics, and the Chinese Economy. His publications appear in Asian Survey, *Journal of Public Economics, American Journal of Agricultural Economics, Journal of Comparative Economics, Economics of Education review, Economics Letters, Pacific Economic Review*, among others.



Title: State-based Overconfidence: An Application to the Credit Market

#### **Abstract:**

Overconfidence (arrogance or overestimation of one's ability) has often been viewed in the finance literature as a character trait that is stable over time. This paper, however, provides a first attempt to show that overconfidence can be state-contingent, that is, the level of overconfidence among overconfident individuals could be influenced by an external shock such as a financial crisis and a change in regulation, for example, the adoption of Sarbanes-Oxley Act (SOX). Both our experimental (based on psychological approach on over-precision) and empirical results using more than 4500 manager-year observations through controlling different personal and firm characteristics show that individual self-confidence can be manipulated in psychological experiment and managerial overconfidence can be statecontingent. We apply our results to the credit market and show that since overconfident managers are excessive risk-takers, creditors could be offering inefficient amounts of bank loans to business firms in the absence of the knowledge about state-contingent overconfidence. However, during financial crisis and under stricter regulation, overconfident managers are still opportunity seekers that they would still look for profitable investment or else they would have exercised their options. Our results show that the firms under the control remaining overconfidence chief company officers during financial crisis and after implementation of SOX would have a significant larger loan amount than the others.

#### **Semi-Plenary Session 1**

#### **Session 2: Macroeconomics**

## Yi WEN (Shanghai Jiao Tong U)

#### Bio:

Professor Yi Wen received a Bachelor's degree from West China Medical University (1982), a Master's degree in Science History and Philosophy from Notre Dame University (1991), and a Ph.D. in Economics from the University of Iowa (1996). Since 2005, he has been serving as Senior Economist and Director of the Research Department of the Federal Reserve Bank of the United States. In 2008, he was promoted to Assistant Vice President, and in the same year, he served as a doctoral supervisor, CCB Chair Professor, and National Thousand Talents Program Scholar at Tsinghua University School of Economics and Management. Joined Antai School of Economics and Management at Shanghai Jiao Tong University in August 2021 as a distinguished professor. The main courses taught include advanced macroeconomics, intermediate macroeconomics, elementary



macroeconomics, applied time series analysis, and the history of the global industrial revolution economy. Research areas include business cycle, monetary policy, fiscal policy, and macroeconomic issues in China. Published more than 50 academic papers in top global economic anonymous review journals.

Title: The Ramsey Steady-State Conundrum in Heterogeneous-Agent Economies

#### **Abstract:**

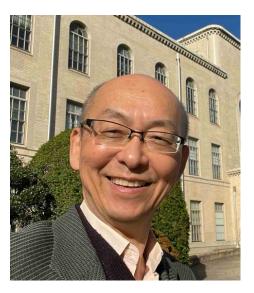
In infinite horizon, heterogeneous-agent and incomplete-market models, the existence of an interior Ramsey steady state is often assumed instead of proven. This paper makes two fundamental contributions: (i) We prove that the interior Ramsey steady state assumed by Aiyagari (1995) does not exist in the standard Aiyagari model. Specifically, a steady state featuring the modified golden rule and a positive capital tax is feasible but not optimal. (ii) We design a modified, analytically tractable version of the standard Aiyagari model to unveil the necessary and/or sufficient conditions for the existence of a Ramsey steady state. These conditions are shown to be quite demanding and sensitive to structural parameter values pertaining to the economy's fiscal space for providing full self-insurance, such as the government's capacity to finance public debt, the degree of intertemporal elasticity of substitution, and the extent of history dependence of individual wealth on idiosyncratic shocks.

In addition, we characterize the basic properties of both interior and non-interior Ramsey steady states and show that researchers may draw fundamentally misleading conclusions on optimal fiscal policies (such as the optimal capital tax rate) from their analysis when an interior Ramsey steady state is erroneously assumed to exist.

#### **Tetsugen HARUYAMA (Kobe U)**

#### Bio:

Professor Tetsugen HARUYAMA received Master of Science from University of Warwick, and then graduated from University of Oxford with M.Phil and D.Phil. He was a senior lecturer in University of Glasgow from 2003 to 2004 and became a professor in Kobe University since Apr. 2004.



Title: A Schumpeterian Exploration of Gini and Top/Bottom Income Shares

#### **Abstract:**

Data show that an increase in the Gini coefficient is associated with a falling bottom pB% income share and an increasing top pT% income share where, e.g. pB = 40 and pT = 1. This relationship, which we call the X inequality relationship, is pervasive in the sense that it is observed in many countries, including the U.S., the U.K., France, and others. The purpose of this paper is (i) to construct a Schumpeterian growth model to explain the relationship, and (ii) to identify/quantify factors behind it via calibration of the U.S economy. Our model gives rise to a double-Pareto distribution of income as a result of entrant and incumbent innovations. Its advantage is that it allows us to develop iso-Gini loci and iso-income share schedules in a tractable way. Using a double-Pareto distribution as an approximation of an underlying income distribution, calibration analysis revels that a declining business dynamism and fiscal policy changes in the past decades played a significant role in generating the X inequality relationship in the U.S.

#### **Session 3: Econometrics**

## Seunghwa RHO (Hanyang U)

#### Bio:

Seunghwa Rho is an Associate Professor at the College of Economics and Finance, Hanyang University. Her primary research areas include time series econometrics, with a particular emphasis on heteroskedasticity and autocorrelation robust inference, and stochastic frontier models. More recently, her work also includes statistical methods that combine traditional econometric approaches with machine learning algorithms.



**Title:** Inference in Time Series Models using Smoothed Clustered Standard Errors

#### **Abstract:**

This paper proposes a long run variance estimator for conducting inference in time series regression models that combines the nonparametric approach with a cluster approach. The basic idea is to divide the time periods into non-overlapping clusters. The long run variance estimator is constructed by first aggregating within clusters and then kernel smoothing across clusters or applying the nonparametric series method to the clusters with Type II discrete cosine transform. We develop an asymptotic theory for test statistics based on these "smoothed clustered" long run variance estimators. We derive asymptotic results holding the number of clusters fixed and also treating the number of clusters as increasing with the sample size. For the kernel smoothing approach, these two asymptotic limits are different whereas for the cosine series approach, the two limits are the same. When clustering before kernel smoothing, we find that the "fixed-number-of-clusters" asymptotic approximation works well whether the number of clusters is small or large. Finite sample simulations suggest that the naive i.i.d. bootstrap mimics the fixed-number-of-clusters critical values. The simulations also suggest that clustering before kernel smoothing can reduce over-rejections caused by strong serial correlation although at a cost of power. When there is a natural way of clustering, clustering can reduce over-rejection problems and achieve small gains in power for the kernel approach. In contrast, the cosine series approach does not benefit from clustering.

## **Seok Young HONG (NTU)**

#### Bio:

Seok Young Hong is an econometrician whose main research interests lie in developing time series methods for economic and financial applications. He is particularly interested in econometric theory, asset pricing, and high frequency financial econometrics. He obtained a PhD in Pure Mathematics and Mathematical Statistics in 2018 from Cambridge University, UK, where he was a recipient of the Smith/Rayleigh-Knight Prize.



**Title:** Unified Inference for Long-Horizon Predictive Regressions Including Mildly Integrated and Explosive Cases

#### **Abstract:**

We propose a unified procedure for testing the predictability of asset returns based on the empirical likelihood method. We make novel econometric contributions by allowing the predictor variable in our unified test to be mildly integrated or mildly explosive in addition to the usual persistence classes permitted in the literature: stationary, locally integrated, and unit root cases. Moreover, we extend this robust procedure to study the long-horizon predictive regression model, which has received much attention as a suitable alternative to examine return predictability. A simulation study confirms our proposed test performs very well in finite sample.

## **Semi-Plenary Session 2**

## **Session 4: Development Economics**

James ANG (NTU)

#### Bio:

James Ang is an Associate Professor of Economics at NTU. He holds a PhD in Economics from the Australian National University. Prior to joining NTU, he taught for several years at Monash University. His research has focused on answering whether financial liberalization has an enhancing or retarding effect, which endogenous growth frameworks can best explain growth experiences of developing economies, and whether credit educational achievement constraints. and international knowledge spillovers play a role in ensuring sustained growth. His most recent research investigates how early development can have a persistent impact on shaping current economic performance.



**Title:** Cultivating Equality: The Effect of Traditional Farming Practices on Gender Disparity in China

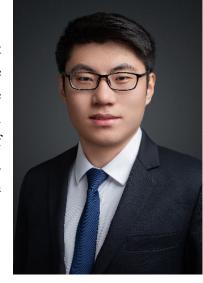
#### **Abstract:**

This study examines the effect of labor demand in traditional farming on contemporary gender equality in China. We hypothesize that regions exposed to agro-climatic conditions conducive to labor-intensive crop cultivation would have historically fostered a greater involvement of female family members in agricultural work. The increased participation of women in farming not only contributed to household income but also elevated their social status. To examine this hypothesis, we analyze county-level data on the labor input required for major crop cultivation in China. Our findings indicate that regions with higher agricultural manpower demand exhibit more balanced sex ratios at birth and demonstrate other indicators of gender equity. These results provide support for the notion that the roots of contemporary gender equality can be traced to the historical involvement of women in farming activities.

## Juncong GUO (Shanghai Jiao Tong University)

#### Bio:

Juncong Guo is a Research Fellow in the Department of Economics at Shanghai Jiao Tong University. His research interests include development economics, labor economics and regional economics. He now focuses on studying spillovers and peer effects using spatial econometric methods. His research has been published in Journal of Development Economics, Regional Science & Urban Economics, Economics Letters and other journals. Juncong received his Ph.D. in Economics from Shanghai Jiao Tong University in 2021.



**Title:** Risk sharing and peer effects in gift spending: Evidence from rural China

#### **Abstract:**

This paper investigates peer effects in gift spending among households in rural China using nationally representative survey data. Social networks serve as informal insurance mechanisms for households, enabling risk sharing through favor exchange with others, and promoting competition to maintain their position within the network, resulting in peer effects. Our empirical study confirms the existence of peer effects and the mechanism of risk sharing. We also explore the consequences of relatively insufficient gift spending and the crowding-out effect of gift spending on other expenditures. Based on our impact analysis of formal economy, we suggest that policymakers can mitigate peer effects by providing more access to formal finance and off-farm employment.

## **Session 5: Microeconomics**

## Daeyoung JEONG (Hanyang U)

#### Bio:

I am an assistant professor at Hanyang University, College of Economics and Finance in South Korea. I consider myself an applied theorist with broad experimental and empirical interests. My research focuses on Game Theory and Mechanism Design Theory, which cover various applications including Information Economics, Political Economy, and Industrial Organization. I received my B.S. in Computer Science and Industrial System Engineering and B.A. in Economics from Yonsei University in South Korea. Under the



direction of Professor James Peck and Professor Lixin Ye, I completed my Ph.D. in Economics at The Ohio State University in 2016. I was an Economist at the Bank of Korea from 2016 to 2018, a post-doctoral research associate at NYU Abu Dhabi from 2018 to 2019, and an assistant professor at POSTECH from 2019 to 2021. I have been at Hanyang University since 2021.

Title: Persuasion under the Influence of Fake News

#### **Abstract:**

We study a Bayesian persuasion game in the presence of the fake news and the uncertainty on the news origin. A related news sender tries to persuade voters by committing a state contingent news reporting strategy in the style of Bayesian persuasion, while a fake news sender with an opposite bias can fabricate a state independent news. Voters receive only one of those news stories without knowing its genuine source. We fully characterize an equilibrium by introducing a novel method of a Rothschild-Stiglitz approach. We show that when the fake news is sufficiently prominent, the related news sender cannot persuade voters since the fake news sender can "dilute" the related news to make it uninfluential: The fake news sender can always generate a prominent unrelated news to make the observed news by the voters less related to the state of nature. On the other hand, when the fake news is not prominent enough, the related news sender can be influential by generating related news associated more strongly to the state of nature against more prominent fake news. Interestingly, this "self-disciplined" related news makes the social welfare, measured by the sum of voters' ex-ante expected utilities, increase in the prominence of fake news.

#### Rachel Juiching HUANG (National Central U)

Bio: Professor Rachel J. Huang joined National Central University in 2014 as a professor of finance and was promoted to the position of distinguished professor in 2018. She holds a Ph.D. in finance from National Taiwan University. Prior to her current position at National Central University, Professor Huang was an associate professor of finance at National Taiwan University of Science and Technology, Yuan Ze University, and Ming Chuang University. Professor Huang's research has focused on risk theory, asymmetric information, and behavioral insurance. Her research has appeared in *Management Science*, *Operations Research*, *Journal of Economic Theory, Economic Theory, Journal of Banking and Finance, Journal of Empirical Finance, Journal of Financial Services Research, The Journal* 



of Risk and Insurance, Insurance: Mathematics and Economics, and Geneva Risk and Insurance Review, among others.

Title: A Simple Approach for Measuring Higher-Order Risk Attitudes

#### Abstract:

While the importance of the Arrow-Pratt coefficients of second order risk aversion is well established in economics, the importance of higher-order risk attitudes has only recently begun to be recognized. In this paper, we introduce a non-parametric approach to directly measure higher-order Arrow-Pratt coefficients using choices between compound lotteries and show how it can be easily implemented in behavioral studies. Specifically, we provide a theoretical basis for using risk apportionment to reveal the intensity of higher-order risk attitudes, and then draw upon our theoretical results to develop a simple, systematic, and generalizable procedure for eliciting Arrow-Pratt coefficients of prudence, temperance, and other higher-order risk attitudes. We demonstrate our approach in a laboratory experiment and find that the modal subject exhibits mild prudence and mild temperance in addition to mild risk aversion. Further, we find that degrees of risk aversion are positively correlated across orders. Finally, while our approach is non-parametric, we note that behavior is broadly consistent with subjects having utility described by the exponential-power function.

#### **Plenary Session 2**

## **Session 6: Empirical Economics and Finance**

## Keishi FUJIYAMA (Kobe U)

#### Bio:

Keishi Fujiyama joined Research Institute for Economics and Business Administration, Kobe University in 2015. He is interested in accounting issues on labor negotiation, foreign ownership, earnings management, income smoothing, and accounting for asset impairment.



**Title:** Transitioning from a Bank towards an Equity-Outsider Financing System in Japan: The impact on Income Smoothing Practice over 40 years

#### **Abstract:**

This study investigates the extent to which income smoothing in Japan has changed over time and the factors affecting this trend. International accounting literature predicts that the financing system in a country determines its accounting system and that as a country changes its financing system, especially from a bank to an equity financing system, its accounting system changes accordingly. In Japan, the financing system has been traditionally bank-oriented. After the collapse of the bubble economy in 1991, it appears to have moved towards an equity-oriented system. This study uses the unique setting of Japan to examine the above prediction relating to accounting change. Using a pooled sample over 40 years (1977-2016), we find that the degree of income smoothing decreased through the 1990s and early 2000s and that this change is associated with lower levels of bank ownership along with higher levels of foreign equity ownership thus providing evidence of the impact on accounting practice of transitioning from a bank towards an equity financing system.

#### **Zhonglin LI (NUS)**

#### Bio:

Zhonglin Li is an assistant professor in the Department of Real Estate, NUS Business School. She is an empirical IO economist with research interests in the broad areas of industrial organization and urban economics. Her current research focuses on retailers and consumer welfare. Dr. Li obtained a PhD degree in Economics at the University of Chicago Booth School of Business.



Title: Big-Box Store Expansion and Consumer Welfare

#### **Abstract:**

Supercenters and warehouse clubs have grown rapidly in the US in recent decades. These big-box retail establishments are physically large to enable one-stop shopping, offering a broad range of product categories with relatively low prices. In this paper, we study how the entry of these big-box stores affect household consumption and welfare. We first present an event study of the store entries of four major big-box retail chains to provide empirical evidence that households change various dimensions of their shopping behavior, such as product varieties per shopping trip and prices paid, in ways that are strongly consistent with store characteristics. We then develop a novel multi-store multi-category choice model to quantify and disentangle the effects of product variety, prices, and other store characteristics on consumer welfare. We show that households benefit substantially from consuming in supercenters relative to competing retailers, highlighting the importance of the store format.

## Wenshu GUO (Lingnan U)

**Bio:** I am a research assistant professor of Economics at Lingnan University, Hong Kong. My research interests are in industrial organization and antitrust. I got my bachelor's degree from the University of Hong Kong and my PhD degree from UCLA. Previously, I worked as an assistant professor at Jinan University in Guangzhou, China.

**Title:** Information Disclosure and Locations Choices: A Study of the Marcellus Shale



#### **Abstract:**

Information disclosure usually affects the decision-making process of both buyers and sellers when the product quality is uncertain, with its ultimate consequence being hard to predict. The phenomenon is particularly evident in the natural resource exploration industry, where the true mineral recovery potential is seldomly known. This research studies the effect of production information disclosure on shale gas operators' lease location choices. Using a novel dataset from the Marcellus Shale, this article finds that the disclosure of production information makes shale gas operators lease more productive parcels despite higher cost, leading to a more efficient resource allocation. A theoretical model is then proposed to explain the learning process of the firms. While the finding of the article justifies the cost of collecting and distributing the production information by the regulating agency, it also shows that centralized information disclosure facilitates learning among firms, creating room for potential strategic behaviors in the long run.