

**SINGAPORE ECONOMIC  
REVIEW**

**Conference 2015**

**5 - 7 AUGUST 2015**

**SINGAPORE**



## Acknowledgments

The SER Editorial Board gratefully acknowledges the contributions of sponsors and their support.

Our sincerest gratitude and thanks to:



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## SERC 2015 Conference Support Secretariat

Joey Kek, Changtai Li, Jingtong Liu, Margaret Toh, Julianna Yik



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## **Welcome Message by the SER Editor**

5 August 2015

Dear SERC 2015 Participants,

I have great pleasure in welcoming you to the 2015 Singapore Economic Review Conference (SERC). The *Singapore Economic Review* (SER) is one of the leading economics journals in this part of the world, having begun as the *Malayan Economic Review* in 1956. Now appearing four times a year, the SER is editorially housed at the Division of Economics, Nanyang Technological University (NTU).

The SER celebrated its 50th year of publication in 2005 by holding the inaugural SER Conference, which was a great success with more than 280 participants coming from 37 countries. This was followed by another four highly visible conferences held in 2007, 2009, 2011 and 2013. Our past keynote speakers have included Professor Edward Prescott, the 2004 Nobel Laureate in Economics, and Professor Joseph Stiglitz, the 2001 Nobel Laureate in Economics and Professor Edward Lazear, former Chairman of the White House Council of Economic Advisers.

This year marks the 60<sup>th</sup> anniversary of the Singapore Economic Review. The SERC Organizing Committee has lined up another exciting conference programme with many distinguished speakers, editors and co-editors from major international journals.

In the traditional manner of a major international conference, we have organized numerous parallel sessions with each session devoted to a different topic. This is in line with the SER being a general economics journal. In addition to the plenary sessions, we have also organized 8 parallel sessions per timeslot that cover the entire spectrum of economic science from theoretical research to practical policy work. In all, over 260 papers will be tabled for presentation to more than 300 participants from nearly 40 countries.

I am grateful for the financial support of the following sponsors: Nanyang Technological University, Monetary Authority of Singapore, Sim Kee Boon Institute for Financial Economics, Next Age Institute and World Scientific.

I would also like to thank the Presidents of Nanyang Technological University, the National University of Singapore, the Singapore Management University and the SIM University for their support in this conference. The SER is proud of the academic contributions and joint cooperation of all 4 Singapore universities in organizing this conference through the active and committed participation of faculty in the journal's editorial board. Through the recent years too, the SER

has benefited greatly from the support of the Council of the Economic Society of Singapore (ESS), representing all the professional economists in government, private sector organizations and academia.

Finally, I want to place on record my gratitude to colleagues from the SER Editorial Board, especially to the members of the Organizing Committee who have put in a significant amount of their time and effort to ensure the success of this conference.

I wish you a productive conference and an enjoyable stay in Singapore.

Yours Sincerely,

Professor Euston Quah  
Editor, *Singapore Economic Review*  
Chair, SERC 2015 Organizing Committee

## General Information

### Meeting Location & Contact Information

Mandarin Orchard Hotel

333 Orchard Road, Singapore 238867

**T:** (65) 6737 4411

**F:** (65) 6732 2361

**E:** orchard@meritushotels.com

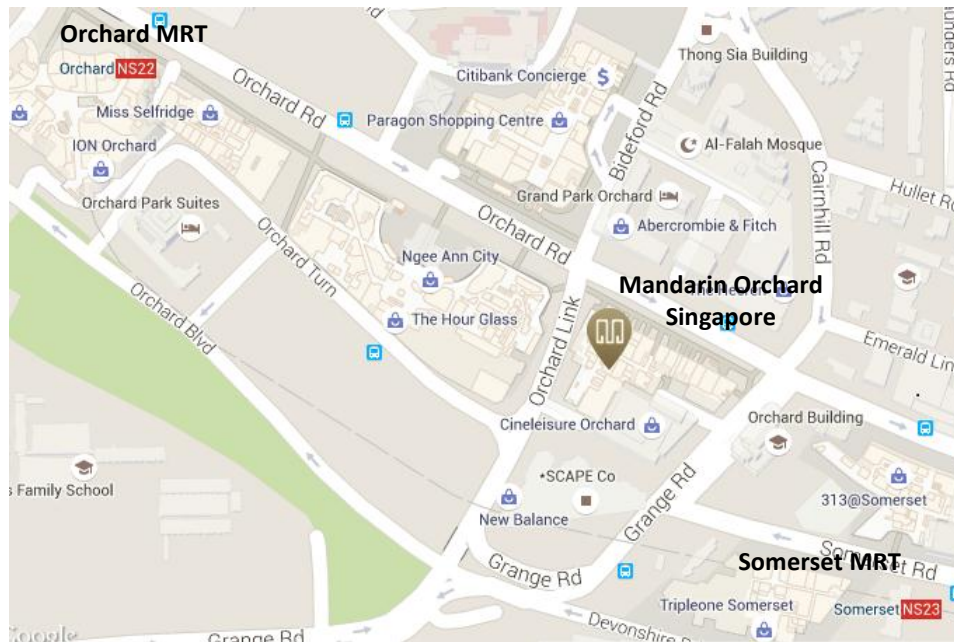
Mandarin Orchard Singapore is easily accessible. The nearest MRT station is *Somerset*. The hotel is accessible via hotel limousines, taxis, airport shuttle buses, trains and public buses from and to the Airport.

### By Taxi

Metered taxis to the hotel are readily available at the Arrival Halls of Singapore Changi Airport. Travelling time from the Airport to the hotel is around 30 minutes. Taxi fare from the Airport is approximately \$25.00 by meter.

### By MRT

Train services are available at the Airport train station located at Terminal 2 and Terminal 3. Transfer to the westbound train at *Tanah Merah* train station to alight at *Somerset* train station. The hotel is a 5-minute walk from the station. MRT fare is \$2.00 per person. More information can be found at: <http://www.smrt.com.sg/Trains/NetworkMap.aspx>



## **Electricity and Plug**

Electricity in Singapore is 230 Volts, alternating at 50 cycles per second. If you travel to Singapore with a device that does not accept 230 Volts at 50 Hertz, you will need a voltage converter. Outlets in Singapore generally accept one type of plug, having two parallel flat pins with ground pin. If your appliances plug has a different shape, you may need a plug adapter.

Singapore plug adapters: the grounded plug adapter WA-7 and the ungrounded plug adapter #5. These are the recommended wall outlet plug adapters for Singapore.

## **Useful Contact Information**

### **Emergency**

Police	999	Flight Info	800 542 4422
Fire Brigade	995	Tourist Hotline	800 736 2000
Ambulance	995	Directory	100

### **Dial a Cab**

Taxi	(65) 6600 2800	TIBS & SMRT	(65) 6555 8888
Comfort & City	(65) 6552 1111	Premier	(65) 6363 6888
Trans-Cab	(65) 6555 3333	SMART	(65) 6485 7777

### **Credit Cards**

AMEX	1800 295 0500	Diners Club	6416 0900
JCB	(65) 6734 0096	Visa	800 448 1250
Master	800 110 0113		

### **Conference Registration**

4 August 2015 (Tuesday) 0400 pm - 0700 pm at Meeting Room 835 at Level 8 of the hotel.

5 – 7 August 2015 (Wednesday - Friday) 0845 am - 0600 pm at Mandarin Ballroom Foyer of the hotel.

All participants are expected to register and collect their conference package prior to attending the conference. A name tag will be provided upon registration and will serve as the official pass to sessions, coffee breaks, lunches and other official functions.

### **Conference Dinner (Strictly for paying participants only)**

**Date** 5 August 2015 (Wednesday)  
**Time** 0700 pm - 1000 pm  
**Venue** Mandarin Orchard Hotel, Mandarin Grand Ballroom at Level 6

### **Daily Tea Reception & Lunch Buffet**

Morning tea and Tea Reception with Journal Editors on 7 August 2015 will be served at Mandarin Ballrooms I and II. Afternoon tea will be served inside the meeting rooms at Level 8.

Lunch will be served daily at Mandarin Ballroom I.

## Conference Rooms and Floor Plans

The opening session and plenary sessions will be held at the Mandarin Ballrooms which are located at Level 6 of the hotel. All other invited and contributed parallel sessions will either be held at Mandarin Ballroom III at Level 6 or Meeting Rooms 831- 837 located at Level 8 of the hotel.

Each session is assigned a unique number which indicates where the session will be held. For instance, Session X.1 will be held at Meeting Room 831 and Session X.2 will be at Meeting Room 832. Please take note that Session X.8 will have the session conducted in Mandarin Ballroom III.

Each paper is also assigned a unique number which indicates when the paper is presented.

Paper number: W123

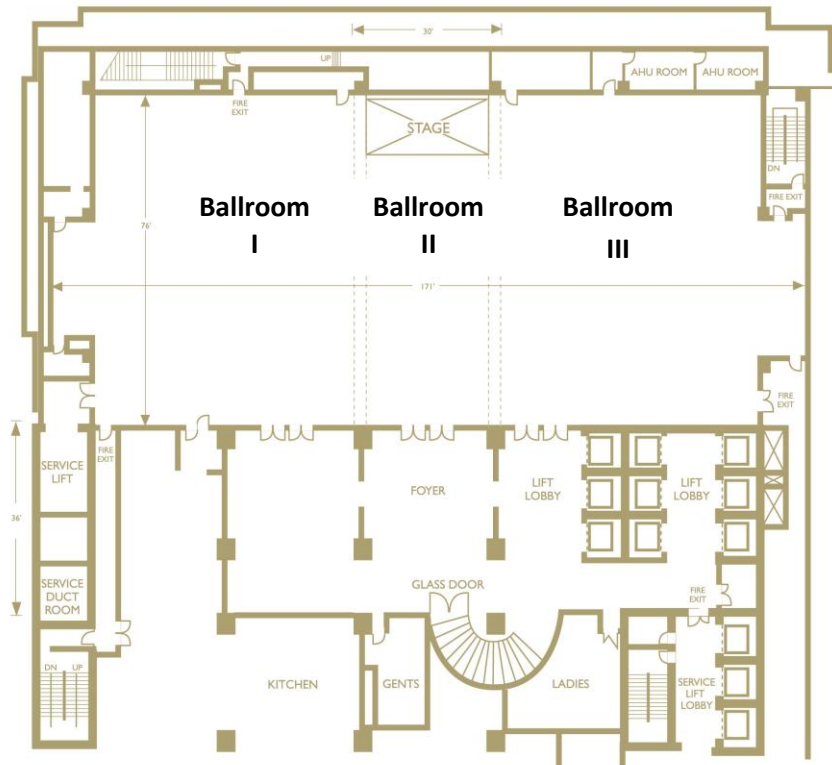
The first character i.e. "W" indicates the day of the conference:

**W:** Wednesday

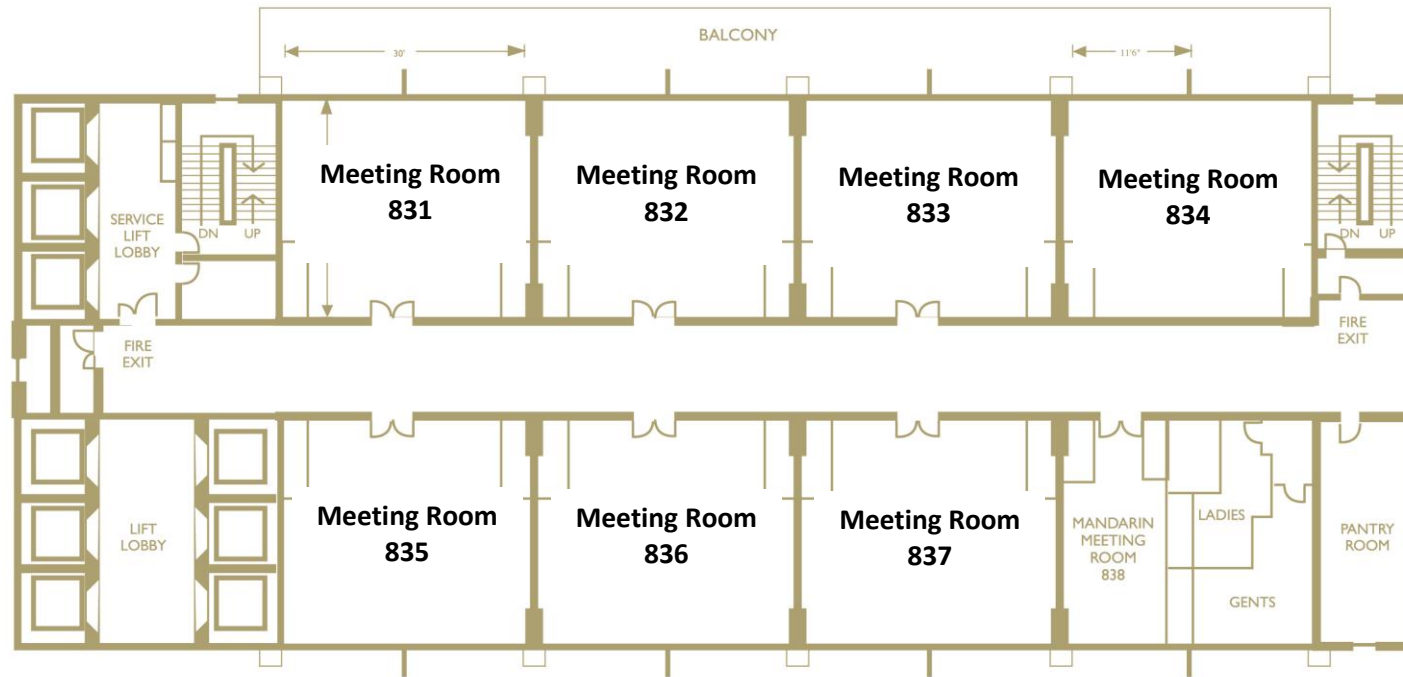
**T:** Thursday

**F:** Friday

### Mandarin Ballrooms at Level 6



### Mandarin Meeting Rooms at Level 8





### **Uploading of Presentation – Service Station and Hours**

Paper presenters are to upload PowerPoint slides to the laptops provided in the meeting rooms 10 minutes before their scheduled presentations. Laptops are able to accept thumb drive, CD-R and CD-RW.

### **Information & Assistance**

Visit the Help Desk located outside Mandarin Ballroom I Foyer at Level 6.

### **Personal Message Board**

If you wish to get in touch with fellow delegates, please leave your message on the Personal Message Board located at the Help Desk outside Mandarin Ballroom I Foyer.

### **Internet Access**

Wireless internet access within the hotel area is chargeable. Please contact the Hotel Business Centre.

### **Travel & Tour**

Tour information is available at the hotel reception.

## SERC 2015 Programme Overview

4 August 2015 Tuesday	5 August 2015 Wednesday	6 August 2015 Thursday	7 August 2015 Friday	
<b>Registration</b> 0400 pm - 0700 pm Meeting Room 835 at Level 8	<b>Registration</b> 0800 am - 0845 am			
	<b>Welcome &amp; Keynote</b> 0845 am - 1015 am	<b>Plenary Session</b> <b>Sim Kee Boon</b> <b>Institute for Financial</b> <b>Economics (SKBI)</b> 0845 am - 1015 am	<b>Tea Reception with Journal</b> <b>Editors</b> 0905 am - 1045 am	
	<b>Tea Reception</b> 1015 am - 1045 am	<b>Tea Reception</b> 1015 am - 1045 am		
	<b>Plenary Session I</b> 1045 am - 1230 pm	<b>Parallel Session III</b> 1045 am - 1205 pm	<b>Parallel Session VI</b> 1045 am - 1205 pm	
	<b>Lunch</b> 1230 pm - 0130 pm	<b>Lunch</b> 1205 pm - 0130 pm	<b>Lunch</b> 1205 pm - 0130 pm	
	<b>Parallel Session I</b> 0130 pm - 0250 pm	<b>Parallel Session IV</b> 0130 pm - 0250 pm	<b>Parallel Session VII</b> 0130 pm - 0250 pm	
	<b>Plenary Session II</b> <b>Special Topics on</b> <b>Contemporary Issues</b> 0250 pm - 0430 pm	<b>Plenary Session</b> <b>Next Age Institute (NAI)</b> 0250 pm - 0420 pm	<b>Plenary Sessions IV &amp; V</b> <b>In Memorial of</b> <b>Ronald McKinnon</b> <b>and E. J. Mishan</b> 0250 pm - 0430 pm	
	<b>Tea Reception</b> 0430 pm - 0500 pm	<b>Tea Reception</b> 0420 pm - 0450 pm	<b>Parallel Session VIII</b> 0430 pm - 0610 pm	
	<b>Parallel Session II</b> 0500 pm - 0600 pm	<b>Parallel Session V</b> 0450 pm - 0630 pm		
	<b>Conference Dinner</b> 0700 pm - 1000 pm			

**5 August 2015 (Wednesday)**

- 0845 am - 0905 am      **Welcome Remarks**  
Euston Quah  
*Editor, Singapore Economic Review (SER)*  
*President, Economic Society of Singapore (ESS)*
- 0905 am - 0935 am      **Address by Keynote Speaker**  
Ravi Menon  
*Managing Director*  
*Monetary Authority of Singapore (MAS)*
- 0935 am - 1005 am      **Opening Plenary: Demographics and Entrepreneurship**  
Edward Lazear  
*Jack Steele Parker Professor of Human Resources Management and Economics, Stanford University*
- 1005 am - 1015 am      Q&A
- 1015 am - 1045 am      Tea Reception
- 1045 am - 1230 pm      **Plenary Session I: Monetary Policy and Policies of Central Bank**  
  
*Chairperson:*  
**Soedradjad Djiwandono**  
*Professor, Rajaratnam School of International Studies, Nanyang Technological University*  
  
*Panelists:*  
**Már Guðmundsson**  
*Governor of the Central Bank of Iceland*  
Financial Integration and Central Bank Policies in Small, Open Economies: What Are the Key Lessons from the Crisis?

**Naoyuki Yoshino**

*Dean, Asian Development Bank Institute (ADBI)*

Financing of SMEs and Startup Businesses in Asia for  
Achieving Sustainable Growth

**Solikin M. Juhro**

*Director, Economic and Monetary Policy Department,  
Bank Indonesia*

The Role of Central Bank in Promoting Sustainable  
Growth: Perspectives on the Implementation of Flexible  
ITF in Indonesia

**Vedat Akgiray**

*Former Head, Capital Markets Board of Turkey  
Bogazici University*

Good Finance: Need for a Coherent Model of Central  
Banking and Financial Markets Regulation

**Ahmet Faruk Aysan**

*Member of the Board, Monetary Policy Committee  
Member, the Central Bank of the Republic of Turkey*

Credit Cycles and Capital Flows: Effectiveness of  
Macroprudential Policy Framework and Lessons for  
Central Banks in Emerging Countries

1230 pm - 0130 pm

Lunch

0130 pm - 0250 pm

**Parallel Session I**

- Session 1.1: Microeconomics
- Session 1.2: Macroeconomics I
- Session 1.3: Chinese Economy I
- Session 1.4: Health, Education and Welfare I
- Session 1.5: Capital Flows and Exchange Rates I
- Session 1.6: Experimental and Behavioral Economics
- Session 1.7: Financial Economics I
- Session 1.8: Real Estate and Housing Economics

0250 pm - 0430 pm

**Plenary Session II: Special Topics on Contemporary Issues**

*Chairperson:*

**Hian Teck Hoon**

*Singapore Management University*

*Panelists:*

**Danny Quah**

*London School of Economics and Political Science*

Ordering the World: Truth to Power

**Robert Stavins**

*Harvard University*

Three Ironies about Climate Change Policy

**Partha Dasgupta**

*University of Cambridge*

Reconstructing Demand Analysis

**Ehud Lehrer**

*Tel Aviv University*

Reward Schemes

**John Rust**

*University of Maryland*

Precommitments for Financial Self-control: Evidence from the 2003 Korean Credit Crisis

0430 pm - 0500 pm      Tea Reception

0500 pm - 0600 pm      **Parallel Session II**

Session 2.1: Firm Behavior and Firm Strategy

Session 2.2: Economic Thought

Session 2.3: Econometric and Statistical Methods and Methodology I

Session 2.4: In Memorial of Anthony Chin

Session 2.5: Welfare and Happiness Economics I

Session 2.6: Housing and Financial Crises

Session 2.7: Social Network and Polarization

Session 2.8: Heterogeneous Agent Model

0700 pm - 1000 pm      **SER Conference Dinner**

**6 August 2015 (Thursday)**

0845 am - 1015 am      **SKBI Plenary Session: Smart Nation, Smart Data and Financial Innovation**

*Chairperson:*

**David Lee**

*Sim Kee Boon Institute for Financial Economics (SKBI),  
Singapore Management University*

*Panelists*

**Wolfgang K. Härdle**

*Humboldt-Universität zu Berlin*

**Sumit Agarwal**

*National University of Singapore*

**Aubeck Kam**

*Ministry of Communications and Information*

**Bernard Wee**

*Monetary Authority of Singapore*

1015 am - 1045 am      Tea Reception

1045 am - 1205 pm

**Parallel Session III**

- Session 3.1: Macroeconomics and Monetary Policy I
- Session 3.2: Economic Development and Technological Change
- Session 3.3: Migration
- Session 3.4: Information, Knowledge and Uncertainty
- Session 3.5: Smart Economic Planning and Industrial Policy (SEPIP)
- Session 3.6: Public Economics I
- Session 3.7: Macroeconomic Aspects of International Trade and Finance
- Session 3.8: Environmental and Energy Economics I

1205 pm - 0130 pm

Lunch

0130 pm - 0250 pm

**Parallel Session IV**

- Session 4.1: Macroeconomics II
- Session 4.2: Financial Economics II
- Session 4.3: Chinese Economy II
- Session 4.4: Behavioral Economics
- Session 4.5: Health, Education and Welfare II
- Session 4.6: Macroeconomics and Monetary Policy II
- Session 4.7: Macroeconomics and Macroeconomic Policy
- Session 4.8: Development Economics

0250 pm - 0420 pm

**NAI Plenary Session: Rethinking Social Security Provision in an Aging Society**

*Chairperson:*

**Kitamura Yukinobu**

*Hitotsubashi University*



***Panelists:***

**Stephen Turnovsky**

*University of Washington*

Social Security Reform in an Aging Society

**Monika Buetler**

*University of St. Gallen*

Unintended Consequences of Means-testing Retirement Benefits

**Ngee-Choon Chia**

*National University of Singapore*

Adding a Basic Pillar to the Central Provident Fund System: An Actuarial Analysis

0420 pm - 0450 pm      Tea Reception

0450 pm - 0630 pm      **Parallel Session V**

- Session 5.1: Investment, Banking and Finance I
- Session 5.2: Econometric and Statistical Methods and Methodology II
- Session 5.3: Public Economics II
- Session 5.4: Banking and Financial Intermediaries
- Session 5.5: Labor and Demographic Economics I
- Session 5.6: Macroeconomics III
- Session 5.7: Financial Economics III
- Session 5.8: Game Theory I

**7 August 2015 (Friday)**

0905 am - 1045 am      **Tea Reception with Journal Editors**

*Chairperson:*

**Euston Quah**

*Nanyang Technological University*

*Panelists:*

**John Rust**

*University of Maryland*

Can the Economics Job Market be Improved?

**David Lee**

*Sim Kee Boon Institute for Financial Economics (SKBI),  
Singapore Management University*

Publication on Asian Economies: Where Are We?

1045 am - 1205 pm      **Parallel Session VI**

Session 6.1:    Macroeconomics IV

Session 6.2:    International Macroeconomics

Session 6.3:    International Trade

Session 6.4:    Health, Education and Welfare III

Session 6.5:    Economic Growth

Session 6.6:    Environmental Economics I

Session 6.7:    Capital Flows and Exchange Rates II

Session 6.8:    Prices, Business, Fluctuations and Cycles

1205 pm - 0130 pm      Lunch

0130 pm - 0250 pm

**Parallel Session VII**

Session 7.1: Natural Resources and Energy Economics

Session 7.2: Industrial Economics

Session 7.3: Welfare and Happiness Economics II

Session 7.4: Macroeconomics V

Session 7.5: Nonmarket Valuation

Session 7.6: Health, Education and Welfare IV

Session 7.7: Environmental Economics II

Session 7.8: Socio-economics

0250 pm - 0430 pm

**Plenary Session IV: In Memorial of Ronald McKinnon**

*Chairperson:*

**Chong Yah Lim**

*Nanyang Technological University*

*Panelists:*

**Charles Yuji Horioka**

*Asian Growth Research Institute*

IS Imbalances and Trade and Current Account Imbalances in Japan

**Masahiro Kawai**

*University of Tokyo*

The Renminbi as an International Currency: In Memory of Ronald I. McKinnon

**Kenichi Ohno**

*National Graduate Institute for Policy Studies*

The Quality of Industrial Policy as a Determinant of Middle Income Traps

**Jonathan Batten**

*Monash University*

Currency Internationalization

**Stephen Grenville**

*Lowy Institute for International Policy*

Rethinking International Capital Flows and What It Means for Indonesia

0250 pm - 0430 pm

**Plenary Session V: In Memorial of E. J. Mishan**

***Chairperson:***

**Euston Quah**

*Nanyang Technological University*

***Panelists:***

**Yew Kwang Ng**

*Nanyang Technological University*

The Proper Limits of the Market: Communitarians vs. Economists

**Parkash Chander**

*Jindal School of Government and Public Policy*

Public Provision of Private Goods in Developing Countries

**Jack Knetsch**

*Simon Fraser University*

Gains and Reductions of Losses: Serious Bias and a Proposed Means to Distinguish and Correct

0430 pm - 0610 pm

**Parallel Session VIII**

- Session 8.1: Labor and Demographic Economics II
- Session 8.2: In Memorial of Professor Hua Sing Lim
- Session 8.3: Macroeconomics and Monetary  
Economics
- Session 8.4: Game Theory II
- Session 8.5: Trade and Economic Integration
- Session 8.6: Macroeconomics VI
- Session 8.7: Environmental and Energy Economics II
- Session 8.8: Investment, Banking and Finance II

**BIOGRAPHIES OF NAI  
AND SKBI INVITED  
SPEAKERS**

6 August 2015

0845am to 1015pm

Ballroom III

**SKBI Plenary Session: Smart Nation, Smart Data and Financial Innovation**

**Session Chair:**

**David Lee**

*Executive Director, Sim Kee Boon Institute for Financial Economics, Singapore Management University*

David Lee holds the appointment of Practice Professor of Quantitative Finance, Lee Kong Chian School of Business, in Singapore Management University. He graduated from the London School of Economics and Political Science with a PhD in Econometrics and Mathematical Economics. David is also an Independent Director of two SGX-listed companies, a property developer, and sits on the Investment Committee and Council of two charitable organizations and the Economic Society of Singapore. He has published in academic and applied journals, including *Journal of Investing*, *Journal of Wealth Management*, *Journal of Statistical Computation and Simulation*, *Applied Financial Economics*, and several books and chapters on Cryptocurrency, Asia Finance, Household Economics and Hedge Funds. His current research is on serving the 70pc underserved, payment systems, financial inclusion, impact investing and financial technology.

**Panelists:**

**Wolfgang K. Härdle**

*Director, Ladislaus von Bortkiewicz Chair of Statistics, Department of Economics and Business Administration, Humboldt-Universität zu Berlin*

Wolfgang Karl Härdle is Ladislaus von Bortkiewicz Chair professor of statistics, Humboldt-Universität zu Berlin. He is director of C.A.S.E. – Center for Applied Statistics & Economics. He is also director of the Collaborative Research Center CRC649 “Economic Risk” and of the Sino German International Research Training Group IRTG1792 “High dimensional non stationary time series analysis” (WISE, Xiamen University). His research focuses on dimension reduction techniques, computational statistics and quantitative finance. He has published 34 books and more than 250 papers in top statistical, econometrics and finance journals. He is one of the “Highly cited Scientist” according to the Institute of Scientific Information. He also has professional experience in financial engineering, structured product design and credit risk analysis.

**Sumit Agarwal**

*Research Associate (IRES, CQF, CBE and RMI), Low Tuck Kwong Professor, Professor of Economics, Finance and Real Estate, Vice Dean (PhD & Research)*

Sumit Agarwal is the Vice-Dean (PhD and Research) and Low Tuck Kwong Professor at the School of Business and Professor in the Departments of Economics, Finance and Real Estate at the National University of Singapore. Previously, he was a senior financial economist in the research department at the Federal Reserve Bank of Chicago and prior to joining the Chicago Fed, he was a senior vice president and credit risk management executive in the Small Business Risk Solutions Group of Bank of America. Sumit's research interests include issues relating to financial institutions, household finance, behavioral finance, international finance, real estate markets, urban economics and capital markets. He has published over fifty research articles in journals like the American Economic Review, Quarterly Journal of Economics, Journal of Political Economy, Journal of Financial Economics.

**Aubeck Kam**

*Permanent Secretary, Ministry of Communications & Information*

Aubeck Kam was appointed Permanent Secretary, Ministry of Communications and Information, on 1 November 2012. Mr Kam joined the Singapore public service in 1989. He graduated with a law degree from King's College London (1992), and was admitted to the Overseas Bar of Lincoln's Inn (1993). He holds a Master in Public Management (2001) from the Lee Kuan Yew School of Public Policy. He has held senior appointments in various public sector organizations, including the Singapore Police Force (1989 to 2002; 2004 to 2006), the Ministry of Trade and Industry (2002 to 2004), the Deputy Secretary of the Ministry of Manpower (2006 to 2010), and the Chief Executive Officer of the Media Development Authority (2010 to 2012). Mr Kam is the Chairman of the Competition Commission of Singapore and a board member of the Civil Service College. He is married with two children.



**Bernard Wee**

*Executive Director, Financial Markets Development Department,  
Monetary Authority of Singapore*

Bernard heads the Financial Markets Development Department. The Financial Markets Development Department aims to promote a vibrant financial market in Singapore, with a focus on developing capital market products and solutions, growing the asset management and insurance sectors, and fostering a sound and innovative technology and payments ecosystem. From 2013 to 2015, Bernard headed the International Department, which oversees MAS' international and regional co-operation. The International Department is also responsible for developing policies to combat money laundering and terrorist financing. From 2007 to 2013, Bernard headed the Monetary Management Division. In his six years there, Bernard was responsible for implementing Singapore's monetary policy operations, managing the Singapore dollar money market, as well as developing the government securities market. Bernard graduated from Columbia University. He earned his Bachelor of the Arts in Political Science and Master of Public Administration between 1997 and 2001. He has two corgis, aged 4 and 10.

6 August 2015

0250pm to 0420pm

Ballroom III

**NAI Plenary Session: Rethinking Social Security Provision in an Aging Society**

**Session Chair:**

**Kitamura Yukinobu**

*Professor of Economics*

*Director, Institute of Economic Research, Hitotsubashi University*

**Panelists:**

**Stephen Turnovsky**

*Ford and Louisa Van Voorhis Professor of Economics, University of Washington*

Stephen J. Turnovsky received his Ph.D. from Harvard University in 1968 and currently holds the Van Voorhis Professorship of Economics at the University of Washington. He was previously a member of the faculties of the University of Pennsylvania, University of Toronto, Australian National University, and the University of Illinois at Urbana-Champaign, where he was the IBE Distinguished Professor of Economics. In 2005 he received a Doctorat honoris causa from the University of Aix-Marseille, France and in 2009 he was awarded an honorary Doctor of Literature from Victoria University of Wellington, New Zealand. He was elected Fellow of the Econometric Society in 1981 and was President of the Society of Economic Dynamics and Control from 1982-84 and of the Society for Computational Economics from 2004-2006. He was Co-Chair of the Program Committee of the Eighth World Congress of the Econometric Society in August 2000. He is serving on, or has served on, many editorial boards the main ones including Journal of Economic Dynamics and Control (editor, 1981-87, 1995-2001, Advisory Editor (2002-), Journal of Money, Credit, and Banking (1987-2010), the Journal of Public Economic Theory (2000-), Macroeconomic Dynamics (2001-, where he is also Special Issues, editor), Journal of Human Capital (2006-), International Economic Review (1972-93), Journal of Public Economics (1982-87), Journal of International Economics (1995-98), and the Open Economies Review (2009-). His main area of research is in the general area of macroeconomic dynamics and growth. Within this area his interests are quite far-ranging, with particular interests in fiscal policy issues and

optimal policy, and extending to both closed economies and open economies. He is the author of several books, as well as having edited several volumes and written many journal articles.

**Monika Bütler**

*Professor of Economics*

*Director, Swiss Institute for Empirical Economic Research Universität St. Gallen*

Monika Bütler is a Professor of Economics and Public Policy and a Director at the Swiss Institute for Empirical Economic Research at the University of St. Gallen. She has degrees in Mathematics/Physics and Economics as well as a PhD in Economics. Before joining the University of St. Gallen, Monika Bütler was an Assistant Professor at Tilburg University and a Professor at the University of Lausanne. She is senior editor of the Journal of Pension Economics and Finance, an Associate Investigator at both CESifo (Munich) and CEPAR (Sydney), and a member of several boards of directors of national and international companies.

**Ngee-Choon Chia**

*Associate Professor of Economics*

*Co-Director Next Age Institute, National University of Singapore*

Dr Ngee-Choon Chia is an Associate Professor in the Department of Economics and the co-director of the Next Age Institute at the National University of Singapore (NUS). She is the co-editor of the Singapore Economic Review and specializes in public finance and economics of aging. She has consulted for the World Bank, the Canadian International Development Research Centre (IDRC), the Asian Development Bank and the Asian Development Bank Institute on tax policy issues. She also provided consultation for the Economic Research Institute for ASEAN and East Asia (ERIA) on social protection issues. She was a member of the National Longevity Insurance Committee and was commissioned by the Singapore Ministry of Manpower to study the retirement adequacy of social security in Singapore for young entrant workers. Her current research interests include pension economics, health economics and the fiscal impacts of aging. Her works have appeared in internationally referred journals such as the Journal of Money, Credit and Banking, Journal of Health Economics, Journal of Policy Modeling, Journal of Pension Economics and Finance.

# **FULL PROGRAMME**

5 August 2015

0130pm to 0250pm

Room 831

**Session 1.1      Microeconomics**

**Session Chair**      Walter Edgar Theseira, Nanyang Technological University

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**W096      The Tragedy of the Commons: Logic of Entry and Dynamics of Open Access under Two Scenarios**

*Hiroaki Hayakawa, University of Brunei Darussalam*

**W159      Sunk Cost as a Self-disciplining Device**

*Fuhai Hong, Nanyang Technological University; Xiaojian Zhao, Hong Kong University of Science and Technology*

**W163      Effort-maximizing Contingent Prize Allocation Rule in Three-battle Contests**

*Xin Feng, National University of Singapore; Jingfeng Lu, National University of Singapore*

**W381      Mirror Matches: Analyzing Matching Markets with n-Dimensional Preferences**

*Sam Flanders, University of North Carolina at Chapel Hill*

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5 August 2015

0130pm to 0250pm

Room 832

**Session 1.2      Macroeconomics I**

**Session Chair**      Mun Heng Toh, National University of Singapore

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**W077      [Invited] Dynamic Shift to a Basket-peg or Floating Regime in East Asian Countries in Response to the People's Republic of China's Transition to a New Exchange Rate Regime**

*Naoyuki Yoshino, Asian Development Bank Institute; Sahoko Kaji, Keio University; Tamon Asonuma, International Monetary Fund*

**W225      Inflation and Inflation Volatility in Thailand**

*Popkarn Arwatchanakarn, University of Newcastle; Akhand Akhtar Hossain, University of Newcastle*

**W073      Inflation Stabilization and Default Risk in a Currency Union**

*Eiji Okano, Nagoya City University; Masashige Hamano, Sophia University; Pierre Picard, University of Luxembourg*

**W330      A Post Keynesian Explanation of Inflation: Evidence from Panel Data**

*Sabri Nayan, Universiti Utara Malaysia*

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Room 833

**Session 1.3 Chinese Economy I**

**Session Chair** Kong Yam Tan, Nanyang Technological University

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**W279 The Evolution and Distribution of Productivity of Chinese Manufacturing**

*Qu Feng, Nanyang Technological University; Guiying Laura Wu, Nanyang Technological University; Zhifeng Wang, Nanyang Technological University*

**W081 The Dynamics of China's Trade Composition and Determinants of the Trade Balance: A Comparison across Selected Partner Countries**

*Biswajit Banerjee, Bank of Slovenia; Xin Li, International Monetary Fund; Yingying Sheng, Goldman Sachs; Haiyan Shi, International Monetary Fund;*

**W116 Overlapping-generations Model and the Optimal Household Savings Rule in China**

*Kevin C. Chua, Shandong University*

**W136 Oil Price and Exchange Rate of China: A Nonlinear Granger Approach**

*Songran Li, Sichuan University; Degong Ma, Sichuan University;*

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5 August 2015

0130pm to 0250pm

Room 834

**Session 1.4 Health, Education and Welfare I**

**Session Chair** David Reisman, Nanyang Technological University

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**W124 Teaching Management in Asia and Africa**

*Yuki Higuchi, Nagoya City University; Tetsushi Sonobe, Nagoya City University*

**W078 An Application of Data Envelopment Analysis Bootstrap to Examine Sources of School Efficiency in Urban and Rural Areas**

*Sui Chin Tan, Universiti Malaysia Sabah; Yii Siing Wong, Universiti Malaysia Sabah; Vincent Pang, Universiti Malaysia Sabah; Chong Mun Ho, Universiti Malaysia Sabah*

**W499 Selective Universities and Intergenerational Mobility**

*Sunha Myong, Washington University in St.Louis*

**W234 Income and Education as the Determinants of Anti-corruption Attitudes: Evidence from Indonesia**

*Anita K. Zonebia, Universitas Padjadjaran; Arief A. Yusuf, Padjadjaran University, Heriyaldi, Universitas Padjadjaran*

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0130pm to 0250pm

Room 835

**Session 1.5 Capital Flows and Exchange Rates I**

**Session Chair** Peter Wilson, Singapore Management University

**W244 Empirical Examinations of the Feldstein-Horioka puzzle : Common Factor Panel and Interval Estimation Approach**

*Isamu Ginama, Hiroshima University; Kazuhiko Hayakawa, Hiroshima University; Takahiro Kanmei, Hiroshima University of Economics*

**W120 Estimating Outward FDI Flows under the Heterogeneous Firm Model: The Case Study of East Asia**

*Kornkarun Cheewatrakoolpong, Chulalongkorn University; Panutat Satchachai, Chulalongkorn University*

**W240 Spillover Effects of Foreign Direct Investment on Domestic Manufacturing Firms in Thailand**

*Paitoon Wiboonchutikula, Chulalongkorn University; Chayanon Phucharoen; Chulalongkorn University; Nuchit Pruektanakul; Chulalongkorn University*

**W412 How do Remittances Affect Food Consumption Basket in the Philippines?**

*Maria Luisa Valera, University of the Philippines Los Banos*

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Room 836

**Session 1.6 Experimental and Behavioral Economics**

**Session Chair** Jack Knetsch, Simon Fraser University

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- W166 The Effect of Confirmation Bias on Investors' Overconfidence Bias and Its Solutions: An Experimental Study**  
*Phaik Nie Chin, Universiti Sains Malaysia*
- W119 Reciprocity and Altruism: Intra-social Preferences**  
*Jingping Li, Shandong University; Yohanes E. Riyanto, Nanyang Technological University*
- W426 Pro-drop and Social Preferences: An Experiment on the Effect of Languages on Economic Decision-making**  
*Tai-Sen He, Nanyang Technological University*
- W510 Asset Markets with Insider Trading Regulations: An Experimental Analysis**  
*Edward Halim, Nanyang Technological University; Yohanes Eko Riyanto, Nanyang Technological University*

*Abstracts start at Page 115*

5 August 2015

0130pm to 0250pm

Room 837

**Session 1.7      Financial Economics I**

**Session Chair**      Weihong Huang, Nanyang Technological University

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**W157      A Comprehensive Study to Out-of Sample Equity Premium Prediction**

*Cindy S.H. Wang, Universit e catholique de Louvain, National Tsing Hua University and National Taiwan University; Shui Ki Wan, Hong Kong Baptist University; Fang-I Liao, National Tsing Hua University*

**W312      Determinants of Corporate Bond Issued in East Asia: A Demand Side View for Asian Bond Market Development**

*Fumiharu Mieno, Kyoto University; Tran Thi Van Anh, Kobe University*

**W430      Modeling Stock Price Volatility with Habit Formation and Learning**

*Pisut Kulthanavita, Thammasat University; Varit Tangvijitsakulb, Thammasat University*

**W289      Complex Interactional Dynamics of Herding and Contrarian Investors**

*Weihong Huang, Nanyang Technological University; Lyon Loh, Nanyang Technological University*

*Abstracts start at Page 118*

5 August 2015

0130pm to 0250pm

Ballroom III

**Session 1.8 Real Estate and Housing Economics**

**Session Chair** Laura Wu, Nanyang Technological University

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**W422 Discounting over the Very Long Run: Evidence from Singapore's Property Market**

*Eric Fesselmeyer, National University of Singapore; Haoming Liu, National University of Singapore; Alberto Salvo, National University of Singapore*

**W437 Property Dispositions and REIT Credit Ratings**

*Qing Li, Singapore Management University; Seow Eng Ong, National University of Singapore; Masaki Mori, National University of Singapore*

**W446 Has Singapore Experienced Housing Bubbles?**

*Inyeob Ji, Dongguk University; Ernie G. S. Teo, Singapore Management University*

**W395 Evaluating Singapore's Housing Policies: A Bounds Testing Approach**

*David Lee, Singapore Management University; Taojun Xie, Singapore Management University*

*Abstracts start at Page 122*

5 August 2015

0500pm to 0600pm

Room 831

**Session 2.1 Firm Behavior and Firm Strategy**

**Session Chair** Yew Kwang Ng, Nanyang Technological University

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**W167 Net Neutrality and Asymmetric Platform Competition**

*Marc Bourreau, Telecom ParisTech; Romain Lestage, Central University of Finance and Economics*

**W475 Earning the Grade or Just Window Dressing? The Effects of Information Disclosure on Restaurant Hygiene Quality**

*Jialiang Zhu, George Washington University*

**W113 Ambiguity Between Pirate Incentive and Collective Desirability within Semi-delegation Pattern**

*Kai Zhao, Huaqiao University; Wanshu Wu, Huaqiao University*

*Abstracts start at Page 125*

5 August 2015

0500pm to 0600pm

Room 832

**Session 2.2      Economic Thought**

**Session Chair**      Shinichi Ichimura, Kyoto University

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**W567      [Invited] The Clash of Civilizations or the Clash of Nations?**

*Shinichi Ichimura, Kyoto University*

**W512      [Invited] Institutions and Gravity Model: The Role of Political Economy and Corporate Governance**

*Mehmet Huseyin Bilgin, Istanbul Medeniyet University; Chi Keung Marco Lau, Northumbria University; Giray Gozgor, Dogus University*

**W516      [Invited] Into the Age of Non-economics**

*Joergen Oerstroem Moeller, Institute of Southeast Asian Studies, Singapore Management University*

*Abstracts start at Page 127*

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0500pm to 0600pm

Room 833

**Session 2.3 Econometric and Statistical Methods and Methodology I**

**Session Chair** Hsiao Cheng, University of Southern California

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**W212 Revisiting an Old Issue by Modern Econometrics Analysis:  
Exchange Rate Risk in the US Stock Market**

*Chi Fang Li, National Tsing Hua University; Cindy S.H. Wang,  
Universit e catholique de Louvain, National Tsing Hua University and  
National Taiwan University; Andrew Y.M. Xie, University of Southern  
California*

**W498 Controlling for Multilateral Resistance Terms in Linearized Trade  
Gravity Equations without Spatial Econometrics**

*Peter H. Egger, ETH Zurich; Kevin E. Staub, University of Melbourne*

**W359 Limiting Distribution of Common Break Estimator in Panels**

*Qu Feng, Nanyang Technological University*

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5 August 2015

0500pm to 0600pm

Room 834

**Session 2.4 In Memorial of Anthony Chin**

**Session Chair** Michael Li, Nanyang Technological University

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**W253 Impact of Transport Infrastructure Investment on International Competitiveness**

*Joko Purwanto and Christophe Heyndrickxa, Transport & Mobility Leuven, Belgium; Jan Kielb, Panteia, the Netherlands; Ofelia Betancorc, M. Pilar Socorro and Aday Hernandezc, Fedea, Spain; Juan Luis Eugenioc, Palmas de Gran Canaria, Spain; Barbara Pawlowskae and Przemyslaw Borkowskie, University of Gdansk, Poland; Ralf Fiedler, Fraunhofer CML, Germany*

**W301 Road Charging in Multi-level-systems: A Political-economic View of National Decisions under Consideration of the EU-level**

*Sonja Krause, University of Bremen; Melanie Nofz, University of Bremen; Tobias Peters, University of Bremen*

**W206 Explaining Gaps in Infrastructure Investment by Municipal Governments in Australia**

*Phil Simmons, University of New England; Brian Dollery, University of New England*

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0500pm to 0600pm

Room 835

**Session 2.5 Welfare and Happiness Economics I**

**Session Chair** Pundarik Mukhopadhaya, Macquaire University

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**W198 Can Happiness Provide New Insights into Social Inequality? Evidence from Japan**

*Yoko Niimi, Aisan Growth Research Institute*

**W269 Drops of Happiness: How Indonesian Value Access to Water in Their House**

*Anissa Rahmawati, Padjadjaran University*

**W436 Religiosity and Happiness: Are Religious People Happier? A Cross Section Analysis of Subjective Happiness in Indonesia**

*Ridho Al Izzati, University of Padjadjaran*

*Abstracts start at Page 133*

5 August 2015

0500pm to 0600pm

Room 836

**Session 2.6      Housing and Financial Crises**

**Session Chair**      Khay Boon Tan, Singapore Institute of Management University

**W288      Inflation Expectation and Financial Crisis: An Empirical Analysis  
based on the TVP-VAR Approach**

*Hiroyuki Ijiri, Kobe University; Toshiki Jinushi, Kobe University*

**W391      Asymmetric Price Transmission and Pairs Trading**

*Kun Ou, Nanyang Technological University; Youngho Chang, Nanyang  
Technological University*

*Abstracts start at Page 135*

5 August 2015

0500pm to 0600pm

Room 837

**Session 2.7      Social Network and Polarization**

**Session Chair**      Edward Tower, Duke University

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**W378      [Invited] Polarization and Strategic Exaggeration**

*Gordon Rausser, University of California at Berkeley; Leo Simon, University of California at Berkeley and Monash University; Jinhua Zhao, Michigan State University*

**W464      The Wisdom of Social Links: Learning, Interaction and Self-organized Efficiency**

*Weihong Huang, Nanyang Technological University; Lyon Loh, Nanyang Technological University*

**W513      Being Seen to Care: The Importance of Lender Visibility in Pro-Social Crowdfunding Campaigns**

*Joe Cox, University of Portsmouth; Thang Nguyen, University of Portsmouth; Andy Thorpe, University of Portsmouth; Alessio Ishizaka, University of Portsmouth; Salem Chakhar, University of Portsmouth; Liz Meech, University of Portsmouth*

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5 August 2015

0500pm to 0600pm

Ballroom III

**Session 2.8 Heterogeneous Agent Model**

**Session Chair** Yang Zhang, University of Macau

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**W481 Short-term Momentum and Long-term Reversal in General Equilibrium: Limited Commitment and Belief Heterogeneity**

*Pablo F. Beker, University of Warwick; Emilio Espino, Universidad Torcuato Di Tella*

**W483 Exponential Bubble and Linear Trend under Heterogeneous Expectations**

*Zichun Huang, Nanyang Technological University; Weihong Huang, Nanyang Technological University; Wai-Mun Chia, Nanyang Technological University*

**W535 Endogenous Fluctuations and Chaos in a Model of Exchange Rate With Heterogeneous Expectations**

*Soumya Datta, South Asian University*

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6 August 2015

1045am to 1205pm

Room 831

**Session 3.1 Macroeconomics and Monetary Policy I**

**Session Chair** Hui Ying Sng, Nanyang Technological University

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**T062 Exchange Rate Arrangement, Monetary Policy and Inflation Volatility: An Empirical Study for Malaysia, 1958-2012**

*Akhand Akhtar Hossain, Newcastle Business School*

**T080 Monetary Policy Rules under Endogenous Asset Market Segmentation**

*Vipul Mathur, Indian Institute of Management Bangalore; Chetan Subramanian, Indian Institute of Management Bangalore*

**T143 Nontraditional Monetary Policy in a Model of Default Risks and Collateral in the Absence of Commitment**

*Hiroshi Fujiki, Chuo University*

**T145 Monetarism Rides Again? US Monetary Policy in a World of Quantitative Easing**

*Vo Phuong Mai Le, Cardiff University; David Meenagh, Cardiff University; Patrick Minford, Cardiff University and CEPR*

*Abstracts start at Page 142*

6 August 2015

1045am to 1205pm

Room 832

**Session 3.2 Economic Development and Technological Change**

**Session Chair** Stephen Turnovsky, University of Washington

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**T200 Agricultural Legacy, Individualistic Culture, and Technology Adoption**

*James B. Ang, Nanyang Technological University*

**T086 The Abridge of Prosperity of British Empire through the History of Lord Elgin Family in 19th Century**

*Masami Kita, Soka University*

**T493 Good Geography, Good Institutions? Historical Evidence from Nineteenth-century British Colonies**

*Eik Leong Swee, University of Melbourne ; Laura Panza, University of Melbourne*

**T273 Influence of External Collaborations and Government R&D Support Policies on Firm Innovativeness: Econometric Evidence from India**

*Srinivas Kolluru, Macquarie University; Pundarik Mukhopadhaya, Macquarie University; Chris Heaton, Macquarie University*

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6 August 2015

1045am to 1205pm

Room 833

**Session 3.3 Migration**

**Session Chair** Yang Tang, Nanyang Technological University

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**T160 Spatial Misallocation across Chinese Cities**

*Carlos Garriga, Federal Reserve Bank of St. Louis; Yang Tang, Nanyang Technological University; Ping Wang, Washington University in St. Louis and NBER*

**T281 Urbanization, Local Rent Seeking and City Size Distribution in China**

*Xiaolu Li, Nanyang Technological University; Yang Tang, Nanyang Technological University*

**T261 Measuring Cross-country Immigration Policies**

*Glenn Rayp, Ghent University; Ilse Ruyssen, Ghent University; Samuel Standaert, Ghent University*

**T173 Migration, Agricultural Production, and Liquidity Constraints: Impacts of Randomized Credit Access**

*Shu Cai, Hong Kong University of Science and Technology*

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6 August 2015

1045am to 1205pm

Room 834

**Session 3.4 Information, Knowledge and Uncertainty**

**Session Chair** Boon Seng Tan, Institute of Singapore Chartered Accountants

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**T079 Complexity of Payment Network**

*Hitoshi Hayakawa, Hokkaido University*

**T188 Render unto Hotelling and Knight What Belongs to Them:  
Equilibrium Exhaustible Resource Price Dynamics with Ambiguity**

*Chen Lin, Shandong University; Shuzhen Yang, Shandong University*

**T317 Human Capital Investment, Signaling, and Wage Differentials**

*Masashi Tanaka, Osaka University*

**T377 The Different Effects of Risk Preferences on the Adoption of  
Agricultural Technology: Evidence from a Rural Area in Cambodia**

*Daichi Shimamoto, Waseda University*

*Abstracts start at Page 152*



6 August 2015

1045am to 1205pm

Room 835

**Session 3.5 Smart Economic Planning and Industrial Policy (SEPIP)**

**Session Chair** Ahmet Faruk Aysan, The Central Bank of the Republic of Turkey

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**T548 [Invited] Foreign Direct Investment, Smart Policies and Economic Growth**

*Murat A. Yülek, Istanbul Commerce University*

**T518 Singapore in the Global Value Chain: Perspectives of Trade in Value-added**

*Mun Heng Toh, National University of Singapore*

**T543 Empowering and Institutionalizing Social Entrepreneurship for Innovation and Inclusive Growth: Public Policy Experiences**

*Muradiye Ates, Yildirim Beyazit University*

**T547 Whither Developmental State in East Asia**

*K. Ali Akkemik; Kadir Has University; Murad Tiryakioğlu; Afyon Kocatepe University*

*Abstracts start at Page 155*

6 August 2015

1045am to 1205pm

Room 836

**Session 3.6 Public Economics I**

**Session Chair** Parkash Chander, Jindal School of Government and Public Policy

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**T172 Tax Competition within the Multi-Level-System of the EU and Developments in the Distribution of Tax Burden**

*André Heinemann, University of Bremen; Andreas Knorr, German University of Administrative Sciences*

**T346 Welfare Analysis of Income Tax Reform for Thailand: Micro-Simulation Approach using Household Micro Datasets**

*Takayuki Kaneda, Kwansei Gakuin University; Kyosuke Kurita, Kwansei Gakuin University*

**T394 Progressive Taxation, Endogenous Growth, and Macroeconomic (In)Stability**

*Shu-Hua Chen, National Taipei University; Jang-Ting Guo, University of California, Riverside*

**T176 Crowding Out Effect of Public Employment on Private Employment in India: A Cointegration Analysis**

*Damodar Nepram, Manipur University; Md. Samsur Jaman, Jiri College*

*Abstracts start at Page 158*

6 August 2015

1045am to 1205pm

Room 837

**Session 3.7      Macroeconomic Aspects of International Trade and Finance**

**Session Chair**      Ramkishen Rajan, George Mason University

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**T524      Does Foreign Bank Presence Affect Financial Inclusion in Emerging and Developing Economies?**

*Sasidaran Gopalan, Hong Kong University of Science and Technology; Ramkishen Rajan, George Mason University and National University of Singapore*

**T545      Open-economy Stabilization Policy in a Contemporary Context**

*Sven W. Arndt, Claremont McKenna College*

**T541      Measuring Economic Interconnections in Asia – The Real Financial Nexus**

*Tony Cavoli, University of South Australia*

**T447      Are Asset Prices in Singapore Driven by Capital Flows?**

*Hwee Kwan Chow, Singapore Management University; Taojun Xie, Singapore Management University*

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6 August 2015

1045am to 1205pm

Ballroom III

**Session 3.8 Environmental and Energy Economics I**

**Session Chair** Jinhua Zhao, Michigan State University

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**T226 [Invited] Energy Labels vs. Regulations: How to Reduce the Number of Inefficient Electrical Appliances in Private Households**

*Renate Schubert, ETH Zurich*

**T560 [Invited] Unilateral policies in a North-South model with capital mobility**

*Partha Sen, University of Delhi*

**T245 Retail Petrol Pricing in Australia's Capital Cities**

*Ming-Hua Liu, University of Macau; Dimitrios Margaritis, University of Auckland Business School; Yang Zhang, University of Macau*

**T293 Waste Disposal Privatization**

*Shuichi Otori, Kansai University; Hiroshi Kinokuni, Ritsumeikan University; Yasunobu Tomoda, Kobe City University of Foreign Studies*

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6 August 2015

0130pm to 0250pm

Room 831

**Session 4.1      Macroeconomics II**

**Session Chair**      Minwook Kang, Nanyang Technological University

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**T117      Loving Thy Neighbor: Charity and Bequest in an Overlapping Generations Model**

*Kent Jason Cheng, University of the Philippines Diliman School of Economics*

**T233      Have Intergovernmental Transfers Stimulated Expenditures in Japan's Local Government**

*Taro Takimoto, Kyushu University; Naoki Sakamoto, Yamagata University*

**T252      Policy Distortion in Capital Market: Evidence from a Fiscal Stimulus Plan**

*Chun-Yu Ho, Shanghai Jiao Tong University; Dan Li, Fudan University; Suhua Tian, Fudan University; Xiaodong Zhu, University of Toronto*

**T519      Land Price and Equity Premium Puzzle**

*Yun Liu, Hong Kong University of Science and Technology*

*Abstracts start at Page 169*

6 August 2015

0130pm to 0250pm

Room 832

**Session 4.2 Financial Economics II**

**Session Chair** Chan Kee Low, Nanyang Technological University

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**T290 Multivariate Copula: An Application to Emerging Financial Markets**

*Le Trung Thanh, Vietnamese German University; Marco Barassi, University of Birmingham*

**T164 Tail Event Driven Asset Allocation: Evidence from Equity and Mutual Funds' Markets**

*Wolfgang Karl Härdle, Humboldt-Universität zu Berlin; David Lee Kuo Chuen, Singapore Management University; Sergey Nasekin, Humboldt-Universität zu Berlin; Xinwen Ni, Nanyang Technology University; Alla Petukhina, Singapore Management University*

**T191 Examining the Directions of Stock Index Movement and Evidence of Market Corrections in Singapore, Hong Kong and USA**

*Yeow Hwee Chua, National University of Singapore; Gamini Premaratne, Universiti Brunei Darussalam*

**T532 Trading Hours' Extension and the China-related Index Futures Markets**

*Yongyang Su, Hang Seng Management College*

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0130pm to 0250pm

Room 833

**Session 4.3 Chinese Economy II**

**Session Chair** Xiaoping Chen, Nanyang Technological University

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- T105 Does Product or Process Innovation Matter for Export? Evidence from Chinese High-Tech Industry**  
*Lin Ye, Central China Normal University; Jiang Yu, Wuhan University*
- T171 Research on the Innovation Efficiency and Its Affecting Factors in China's High-tech Industries Based on SFA**  
*Hua Gao, Wuhan University*
- T177 Credit Constraints, Political Connections, and Private Enterprise Exports: Empirical Evidence from China**  
*Yue Lu, University of International Business and Economics; Ka Zeng, University of Arkansas*
- T300 Trade Credit in China: Panel Evidence Based on the Survey of Industrial Enterprises**  
*Yajing Liu, Kobe University*

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Room 834

**Session 4.4 Behavioral Economics**

**Session Chair** Tai-Sen He, Nanyang Technological University

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**T262 Sunk Cost Fallacy - Effect of Situational Knowledge on Irrational Choices**

*Balasubramanian P, Amrita University; Kalyanasundaram K, Amrita University; Aravindhana S, Amrita University*

**T306 “Property Tax Governance” in Multi-level-systems: A Political-Economic Comparison Between The United States of America and Germany**

*Sonja Krause, University of Bremen; Melanie Nofz, University of Bremen*

**T342 Effects of the Price on Charitable Giving: Evidence Based on Time-series Data and Measures of Exogenous Tax Changes**

*Shih-Ying Wu, National Tsing Hua University; Yi-Hua Wu, Industrial Technology Research Institute of Taiwan*

**T514 The Influence of Investor Network on China’s Capital Allocation Efficiency**

*Yueming Bai, Nankai University; Zifeng Wang, Nankai University; Liuling Li, Nankai University; Han He, University of California, Davis*

*Abstracts start at Page 179*



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0130pm to 0250pm

Room 835

**Session 4.5 Health, Education and Welfare II**

**Session Chair** Christos Sakellariou, Nanyang Technological University

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**T148 Gender, Sibling Order, and Differences in the Quantity and Quality of Education: Evidence Using Japanese Twin Data**

*Tien Manh Vu, Osaka University; Hisakazu Matsushige, Osaka University*

**T335 The Effect of PTA Teachers and Government Employed Teachers on Pupils' School Outcomes in Kenya Primary Schools**

*Ayako Wakano, Osaka University*

**T351 Efficient Education Subsidization and the Pay-As-You-Use Principle**

*Bei Li, University of Western Australia; Jie Zhang, National University of Singapore*

**T515 Mind The Gap: What Explains Malaysia's Underperformance in PISA?**

*Liyanage Devangi Perera, Monash University; Mohammad Asadullah, University of Reading*

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6 August 2015

0130pm to 0250pm

Room 836

**Session 4.6      Macroeconomics and Monetary Policy II**

**Session Chair**      Soedradjad Djiwandono, Nanyang Technological University

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**T152      How Effective Are The Monetary Policy Changes Made by the Central Bank?**

*Moid U. Ahmad, Jaipuria Institute of Management Noida*

**T186      Monetary Policy Analysis of a Small Emerging Open Economy using a Structural VARMA Model**

*Mala Raghavan, University of Tasmania; George Athanasopoulos, Monash University; Param Silvapulle, Monash University*

**T217      Determinants of Rapid Monetary Actions**

*Jacinta Bernadette I. Rico, Waseda University*

**T361      Is Inflation Targeting Credible in Asia? A Panel GARCH Approach**

*Harold Glenn A. Valera, University of Waikato; Mark J. Holmes, University of Waikato; Gazi Hassan, University of Waikato*

*Abstracts start at Page 185*

6 August 2015

0130pm to 0250pm

Room 837

**Session 4.7      Macroeconomics and Macroeconomic Policy**

**Session Chair**      Siang Ng, Nanyang Technological University

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- T375      [Invited] Taxes and the Tertiary Burden of a Transfer**  
*Edward Tower, Duke University; Victor Yi, Duke University*
- T396      Fiscal Policy, Exchange Rate Management & Competitiveness**  
*Augustine Tan, Singapore Management University*
- T017      Indeterminacy with No-income-effect Preferences and Externalities:  
A Re-examination**  
*Yan Chen, Shandong University ; Yan Zhang, Shanghai University of  
Finance and Economics*
- T185      Loss Aversion, Inefficiencies and Policy Interventions**  
*Meng Li, Universidad Carlos III de Madrid*

*Abstracts start at Page 188*

6 August 2015

0130pm to 0250pm

Ballroom III

**Session 4.8      Development Economics**

**Session Chair**      Ridwan D. Rusli, Nanyang Technological University

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**T193      The ‘Lewis Turning Point’ in China and Its Implication for the Emergence of a ‘Middle Income Trap’: Evidence from Provincial Data**

*Claire Harvey, Charles Sturt University; John Hicks, Charles Sturt University*

**T403      Wealth and Population Growth under Dynamic Average Utilitarianism**

*Rintaro Yamaguchi, Kyoto University*

**T178      A General Equilibrium Simulation on the Income Distribution**

*Toshitaka Fukiharu, Aoyama Gakuin University*

**T383      Impact of Electrification on Child Nutritional Status in Rural Bangladesh**

*Tomoki Fujii, Singapore Management University; Sijia Xu, Singapore Management University; Abu Shonchoy, Institute of Developing Economies (IDE) JETRO*

*Abstracts start at Page 190*

6 August 2015

0450pm to 0630pm

Room 831

**Session 5.1 Investment, Banking and Finance I**

**Session Chair** Huanhuan Zheng, Nanyang Technological University

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**T538 Mortgage Lending and Financial Stability in Asia**

*Peter J. Morgan, Asian Development Bank Institute; Yan Zhang, Asian Development Bank Institute*

**T272 Overconfidence, Gender Characteristics and Trading Performance in an Experimental Financial Market**

*Woon Wong, Cardiff Business School; Xinran Zhao, Cardiff Business School*

**T388 Managerial Reputation and Market Discipline**

*Koji Asano, Osaka University*

**T443 Investor Preference for Speculation and Information Efficiency of Stock Prices**

*Chin-Wen Hsin, Yuan Ze University*

**T135 Hidden Skewness: On the Difficulty of Multiplicative Compounding under Random Shocks**

*Ludwig Ensthaler, Humboldt University Berlin; Olga Nottmeyer, IZA Bonn; Georg Weizsäcker, Humboldt University Berlin; Christian Zankiewicz, German Institute for Economic Research (DIW Berlin)*

*Abstracts start at Page 192*

6 August 2015

0450pm to 0630pm

Room 832

**Session 5.2 Econometric and Statistical Methods and Methodology II**

**Session Chair** Qu Feng, Nanyang Technological University

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- T222 Microeconometric Analysis of Eating-out Behavior of Modern Filipino Households: The Tobit, the Craggit and the Heckit Models**  
*Cesar C. Rufino, De La Salle University – Manila*
- T444 Maximum Score Estimation of the Binary Response Model with Additive Latent Equation**  
*Jerome M. Krief, University of Miami*
- T067 A Bayesian Approach to Modelling Bivariate Time-varying Cointegration and Cointegrating Rank**  
*Chew Lian Chua, University of Melbourne; Sarantis Tsiaplias, University of Melbourne*
- T550 An Econometrics Analysis of the Underground Economy in Oman: Evidence from Gregory-Hansen Cointegration Based Currency Demand Approach**  
*Awadh Ahmed Mohammed Gamal, Universiti Utara Malaysia; Jauhari B. Dahalan, Universiti Utara Malaysia*
- T228 All Together Now! - A Survey of the GPGPU Parallel Paradigm in Economics**  
*Eric M. Scheffel, University of Nottingham Ningbo*

*Abstracts start at Page 195*

6 August 2015

0450pm to 0630pm

Room 833

**Session 5.3      Public Economics II**

**Session Chair**      Giovanni Ko, Nanyang Technological University

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**T170      Basic and Applied Research: A Welfare Analysis**

*Kunihiko Konishi, Osaka University*

**T155      Social Norms and Governance: The Behavioral Response to Female Leadership**

*Lata Gangadharan, Monash University; Tarun Jain, Indian School of Business; Pushkar Maitra, Monash University; Joe Vecci, Monash University*

**T410      Possible Effects of the Philippine Sin Tax Reform on Women's Smoking Behavior**

*Miguel Antonio Estrada, University of the Philippines*

**T142      Institutional Determinants of Public Sector Efficiency: A Cross-national Empirical Study with Two-stage DEA Method**

*Yanyan Gao, Southeast University; Qin Zhou, Southeast University*

**T158      Optimal Disability Insurance and Unemployment Insurance with Cyclical Fluctuations**

*Hsuan-Chih Lin, University of Wisconsin-Madison*

*Abstracts start at Page 199*

6 August 2015

0450pm to 0630pm

Room 834

**Session 5.4 Banking and Financial Intermediaries**

**Session Chair** *Zhe Fu, The George Washington University*

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- T327**     **Comparison between Traditional and Econometric Methods Used to Estimate the Economic Efficiency of a Bank's Branches**  
*Jacek Barbarski, Cracow University of Economics*
- T343**     **Does Bank Restructure Lead to Higher Efficiency? An Investigation of the Vietnamese Banking System**  
*Xuan Vinh Vo, University of Economics Ho Chi Minh City; Huu Huan Nguyen, University of Economics Ho Chi Minh City*
- T194**     **Measuring Systemic Risk Potential across Banks in Asia**  
*Jones Odei Mensah, University of Brunei Darussalam; Gamini Premaratne, University of Brunei Darussalam*
- T238**     **Efficiency of Financial Intermediaries for People's Credit Bank in Indonesia: Data Envelopment Analysis**  
*Ade Maulana R. H., Universitas Padjadjaran; Heriyaldi, Universitas Padjadjaran;*
- T540**     **Financial Intermediation Cost and Income Inequality**  
*Zhe Fu, The George Washington University*

*Abstracts start at Page 202*



6 August 2015

0450pm to 0630pm

Room 835

**Session 5.5 Labor and Demographic Economics I**

**Session Chair** Soon Beng Chew, Nanyang Technological University

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**T259 Probationary Contracts, Employment Protection and Work Incentives in the Frictional Labor Market**

*Makoto Masui, Soka University*

**T199 Historical Return to Education in Malaysian Labor Market after Independence**

*Hazrul Shahiri, Univeriti Kebangsaan Malaysia*

**T358 Cost-Benefit Analysis of Macro-focused Union Membership with Non-collective Bargaining Benefits**

*Soon Beng Chew, Nanyang Technological University; Yang Tang, Nanyang Technological University*

**T216 The Cost of Being a Black Sheep: The Employment Discrimination of GMS Migrant Workers in Thailand**

*Charamporn Holomyong, Mahidol University; Kathleen Ford, University of Michigan*

**T506 Earnings, Employment and Income in China: Does Communist Party Membership Matter?**

*Mohammad Asadullah, University of Reading; Saizi Xiao, University of Malaya*

*Abstracts start at Page 206*

6 August 2015

0450pm to 0630pm

Room 836

**Session 5.6      Macroeconomics III**

**Session Chair**      *Ahiphat Muthitacharoen, Chulalongkorn University*

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**T432      Gauging Households' Debt Tolerance: Evidence from Thailand**

*Athiphat Muthitacharoen, Chulalongkorn University*

**T242      Liquidity Shock, Animal Spirits and Bank Runs**

*Qiao Huang, Nanyang Technological University*

**T237      Excess Liquidity and Commodity Boom**

*Sanae Ohno, Musashi University*

**T423      Matched-sign Discounting and Neoclassical Consistencies**

*Prapas Bawornbancha, Thammasat University*

**T084      Analysis of the Classic Keynesian Theory for 3 Countries Based on a New SVAR Model**

*Wen Wang, Nankai University; Jiayi Zhu, Yale University; Qiwei Yang, The Ohio State University; Liuling Li, Nankai University; Bruce Mizrach, Rutgers University*

*Abstracts start at Page 210*

6 August 2015

0450pm to 0630pm

Room 837

**Session 5.7 Financial Economics III**

**Session Chair** Manu Bhaskaran, National University of Singapore

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**T192 Endogenous Fundamental, Financial Bubbles and Wealth Accumulation**

*Weihong Huang, Nanyang Technological University; Yu Zhang, Nanyang Technological University*

**T071 International Sign Predictability of Stock Returns: The Role of the United States**

*Henri Nyberg, University of Helsinki; Harri Pönkä, University of Helsinki and CREATES*

**T496 Openness and Financial Stability**

*Madhavi Pundit, Asian Development Bank; Arief Ramayandi, Asian Development Bank; Christopher F. Baum, Boston College and DIW Berlin*

**T449 Finance Development and Innovation: The Role of Political Institutions**

*Chun-Yu Ho, Shanghai Jiao Tong University; Shaoqing Huang, Shanghai Jiao Tong University; Hao Shi, Shanghai Jiao Tong University; Jun Wu, Shanghai Jiao Tong University*

**T536 Can Risk Attitude on Stock Market Affect Investors' Lending Decision? Evidence from P2P Lending Platform of China**

*Xue Chen, Shenzhen University*

*Abstracts start at Page 214*

6 August 2015

0450pm to 0630pm

Ballroom III

**Session 5.8      Game Theory I**

**Session Chair**      Ehud Lehrer, Tel Aviv University

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**T313      Pay to Quit and Team Incentives**

*Pak Hung Au, Nanyang Technological University*

**T324      Cheap Talk with Outside Option: An Experimental Analysis**

*Kaiwen Leong, Nanyang Technological University; Huailu Li, Boston University; Haibo Xu, Fudan University*

**T098      Structural Manipulation in a Multi-period Sender-receiver Game:  
Never Say Never**

*Hanjoon Michael Jung, The Institute of Economics, Academia Sinica*

**T487      Two-sided Replacement and Renegotiation-proofness**

*Hee Chun Kim, Washington University in St.Louis*

*Abstracts start at Page 218*

7 August 2015

1045am to 1205pm

Room 831

**Session 6.1      Macroeconomics IV**

**Session Chair**      Charles Yuji Horioka, Asia Growth Research Institute

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**F561      [Invited] Evaluating the Effectiveness of China's Financial Reform-  
The Efficiency of China's Domestic Banks**

*Hsiao Cheng, University of Southern California*

**F562      [Invited] A Dynamic General Equilibrium IS-LM Model**

*Takashi Kamihigashi, Kobe University*

**F247      Capital Misallocation in China: Financial Frictions or Policy  
Distortions?**

*Guiying Laura Wu, Nanyang Technological University*

**F181      A Fully Funded or Pay-As-You-Go Social Security: In the Case of  
Aging Small Open Economies**

*Yoshitaka Koda, Chulalongkorn University*

*Abstracts start at Page 221*

7 August 2015

1045am to 1205pm

Room 832

**Session 6.2 International Macroeconomics**

**Session Chair** Joseph Dennis Alba, Nanyang Technological University

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**F123 On Causality between Real Exchange Rate – Inflation in Emerging Economies: An Application of Toda-Yamamoto Dynamic Granger Causality Test**

*Mohammed Umar, Federal University Kashere-Nigeria and Universiti Utara Malaysia; Jauhari Dahalan, Universiti Utara Malaysia*

**F463 Risk and Return Spillovers among the G10 Currencies**

*Matthew Greenwood-Nimmo, the University of Melbourne; Viet Hoang Nguyen, Melbourne Institute of Applied Economic and Social Research; Barry Rafferty, the University of Melbourne*

**F208 Oil Price Shocks and Macroeconomic Adjustments in Oil-exporting Countries**

*Wee Chian Koh, The Australian National University*

**T448 Looking at Good and Bad Times around the World**

*Yong Yoon, Chulalongkorn University*

*Abstracts start at Page 224*

7 August 2015

1045am to 1205pm

Room 833

**Session 6.3 International Trade**

**Session Chair** Augustine Tan, Singapore Management University

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**F083 Learning-by-exporting and Performance-related Pay: Evidence from South Korea**

*Youngho Kang, Soongsil University; Sangmoo Lee, Korea Development Institute*

**F114 Effects of Exchange Rate Variations on Bilateral Trade with a Vehicle Currency: Evidence from China and Singapore**

*Guangpu Yang, National University of Singapore; Qingyang Gu, National University of Singapore*

**F201 Friends or Rivals? – The Roles of Exchange Rates on Export Competitiveness and the Balances of Trade in Taiwan and South Korea**

*Yu-Li Wang, National Dong Hwa University; Ruei-Shiang Wang, National Dong Hwa University*

**F322 Does Trade Liberalization Boost Quality Upgrading? Evidence from Indonesian Plant-product-level Data**

*Kazunobu Hayakawa, Institute of Developing Economies, Thailand; Toshiyuki Matsuura, Keio University; Sadayuki Takii, Seinan Gakuin University*

*Abstracts start at Page 227*

7 August 2015

1045am to 1205pm

Room 834

**Session 6.4 Health, Education and Welfare III**

**Session Chair** Qiyam Ong, National University of Singapore

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**F092 Health and Income Inequality: An Analysis of Public Versus Private Health Expenditure**

*Ayona Bhattacharjee, Indian Institute of Management Bangalore; Jong Kook Shin, Newcastle University Business School; Chetan Subramanian, Indian Institute of Management Bangalore*

**F118 Why Are Informal Sectors Reluctant to Join the National Health Insurance In Indonesia?**

*Teguh Dartanto, University of Indonesia; Jahen Fachrul Rezki, University of Indonesia; Usman, University of Indonesia; Chairina Hanum Siregar, University of Indonesia; Hamdan Bintara, University of Indonesia; Wahyu Pramono, University of Indonesia*

**F005 The Impact of Immigrant Peers on Native Students' Academic Achievement: In Countries Where Parents of Immigrants Are Relatively Skilled**

*Kelvin KC Seah, National University of Singapore*

**F285 Child Labor and Capital Accumulation in Developing Economy**

*Ken-ichiro Ikeshita, Kanazawa University; Hideaki Uchida, Mie University*

*Abstracts start at Page 230*



7 August 2015

1045am to 1205pm

Room 835

**Session 6.5 Economic Growth**

**Session Chair** James Ang, Nanyang Technological University

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**F069 Cash-in-advance Constraints in a Schumpeterian Growth Model with an Endogenous Market Structure**

*Chienyu Huang, Southwestern University of Economics and Finance; Juin-Jen Chang, Academia Sinica; Lei Ji, SKEMA Business School*

**F356 Economic Growth, Financial Development, and Income Inequality**

*Donghyun Park, Asian Development Bank; Kwanho Shin, Korea University*

**F094 South East Asian Economies: A Quantitative Assessment of Their Potential of Becoming Developed**

*Eu Chye Tan, University Of Malaya; Chor Foon Tang, Universiti Sains Malaysia*

**F434 How Demographic Change Affects Economic Growth?**

*Piyachart Phiromswad, Sasin of Chulalongkorn University*

*Abstracts start at Page 233*

7 August 2015

1045am to 1205pm

Room 836

**Session 6.6 Environmental Economics I**

**Session Chair** Youngho Chang, Nanyang Technological University

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**F151 Emission Permits and Public Pollution Abatement: Can Decentralized Environmental Policies be Efficient?**

*Nikos Tsakiris, University of Ioannina; Panos Hatzipanayotou, Athens University of Economics and Business; Michael Michael, University of Cyprus*

**F268 Tradable Emission Permits, Capital Mobility and Cross-border Pollution: A Welfare Ranking**

*Nikos Tsakiris, University of Ioannina; Panos Hatzipanayotou, Athens University of Economics and Business; Michael Michael, University of Cyprus*

**F488 On the Complementarity of Pollution and Population Control under Economic Growth**

*Maria Kamran, The University of Queensland; Stuart McDonald, The Renmin University of China*

**F374 Managerial Environmental Incentives Under Emissions Tax**

*Soo Keong Yong, Xi'an Jiaotong-Liverpool University*

*Abstracts start at Page 235*

7 August 2015

1045am to 1205pm

Room 837

**Session 6.7 Capital Flows and Exchange Rates II**

**Session Chair** Stephen Grenville, Lowy Institute for International Policy

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**F106 Effects of Exit Strategy of the Quantitative Easy Monetary Policy on East Asian Currencies**

*Eiji Ogawa, Hitotsubashi University; Zhiqian Wang, Hitotsubashi University*

**F283 The Determinants behind the Intensity of Capital Flow Surges and Reversals**

*Chiratus Ratanamaneichat, Kasem Bundit University; Samuel M. Schreyer, Fort Hays State University; Shao Ruo, Shenyang Normal University*

**F070 Finding Stability in a Time of Crisis: Lessons of East Asia for Eastern Europe**

*Paul McNelis, Fordham University*

**F249 Remittances and Economic Growth in ASEAN**

*Sutida Plyngam, Srinakharinwirot University*

*Abstracts start at Page 237*

7 August 2015

1045am to 1205pm

Ballroom III

**Session 6.8 Prices, Business, Fluctuations and Cycles**

**Session Chair** Joergen Moeller, Institute of Southeast Asian Studies (ISEAS)  
Singapore Management University

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**F495 Vertical Intra-industry Trade and Correlation of Business Cycles in East Asia**

*Jingjing Meng, Waseda University*

**F352 Bank Monitoring Dynamics and Inefficiency over the Business Cycle**

*Vishrut Rana, Singapore Management University*

**F082 Do Credit Market Imperfections Justify a Central Bank's Response to Asset Price Fluctuations?**

*Kengo Nutahara, Senshu University and the Canon Institute for Global Studies*

**F246 Multilateral and Bilateral Multi-country Models: Differences in Spillover Estimates?**

*Georgios Georgiadis, European Central Bank*

*Abstracts start at Page 239*

7 August 2015

0130pm to 0250pm

Room 831

**Session 7.1      Natural Resources and Energy Economics**

**Session Chair**      Renate Schubert, ETH Zurich

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- F013      A Real Options Model Using Binomial Decisions Tree Analysis to Value a Mining Investment Decision in the Asia-Pacific Region**  
*Nam Foo, Curtin University*
- F046      Is Foreign Direct Investment in China's Iron Ore Mining Sector Productive?**  
Sajid Anwar, University of the Sunshine Coast; Sizhong Sun, James Cook University
- F355      Economic Activity, Energy Structures, and Carbon Emissions in the Asia-Pacific Region: Drivers and Trends**  
*Di Yin, Nanyang Technological University; Youngho Chang, Nanyang Technological University*
- F478      From Natural Resource Boom to Sustainable Economic Growth: Lessons for Mongolia**  
*Pranav Gupta, International Monetary Fund; Bin Grace Li, International Monetary Fund; Jiangyan Yu, International Monetary Fund*

*Abstracts start at Page 242*

7 August 2015

0130pm to 0250pm

Room 832

**Session 7.2 Industrial Economics**

**Session Chair** Pak Hung Au, Nanyang Technological University

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**F024 Competition among the Big and the Small with Different Product Substitution**

*Lijun Pan, Nagoya University; Makoto Hanazono, Nagoya University*

**F504 Production and Hedging Decisions under Regret**

*Xu Guo, Nanjing University of Aeronautics and Astronautics; Wing-Keung Wong, Hong Kong Baptist University; Xuehu Zhu, Hong Kong Baptist University*

**F411 Patent Competition with Licensing**

*Rong Ding, National University of Singapore; Chiu Yu Ko, National University of Singapore*

**F274 The Smile Curve: Evolving Sources of Value Added in Manufacturing**

*Richard Baldwin, Graduate Institute of International Studies; Tadashi Ito, Graduate Institute of International Studies*

*Abstracts start at Page 245*

7 August 2015

0130pm to 0250pm

Room 833

**Session 7.3 Welfare and Happiness Economics II**

**Session Chair** Giorgio Dominese, Transition Studies Research Network

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**F291 [Invited] Intellectual Capital Evaluation for a “New Deal” in Welfare Policies and Management**

*Andrea Garlatti, University of Udine, CIWE; Giorgio Dominese, Transition Studies Research Network and Transition Academia Press, Venice; Stefano Miani, University of Udine, OSSFI*

**F168 Happiness and Life Satisfaction: A Comparison Study Between Malaysia and Singapore**

*Mei Chin Boo, Kolej Universiti Tunku Abdul Rahman; Siew Hwa Yen, Universiti Sains Malaysia; Hock Eam Lim, Universiti Utara Malaysia*

**F321 An Exploratory Study on Developing a Natural Resource into a Wellness Spa**

*Gladys M. Navarro, Saint Louis University, Philippines; Christine P. Manipon, Saint Louis University, Philippines; John Paul B. Villanueva, Saint Louis University, Philippines; Eleanor P. Garoy, Saint Louis University, Philippines*

**F308 Does Altruism depend on Gender and Marital Status: Evidence from a Structural Model of Transfers to Parents from Their Adult Children in South Korea**

*John C. Ham, National University of Singapore; Heonjae Song, University of Seoul*

*Abstracts start at Page 248*

7 August 2015

0130pm to 0250pm

Room 834

**Session 7.4      Macroeconomics V**

**Session Chair**      Jonathan Batten, Monash University

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**F287      The Welfare Economics of Austerity in Open Economies**

*Kim-Heng Tan, Nanyang Technological University*

**F345      Does Financial Integration Accelerate FDI and Spur Growth**

*Ahmed M. Khalid, Bond University and Lahore University of Management Sciences*

**F144      Commodity Market Performance during the Quantitative Easing Times**

*Bernard Morard, University of Geneva; Florentina Olivia Balu, University of Geneva*

**F489      The Impact of Public Investment on Private Investment: Evidence from India**

*Pradyumna Dash, Indian Institute of Management Raipur, India*

*Abstracts start at Page 252*



7 August 2015

0130pm to 0250pm

Room 835

**Session 7.5 Nonmarket Valuation**

**Session Chair** Wai Mun Chia, Nanyang Technological University

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**F169 The Value of Statistical Life: Results from the Thai Labor Market**

*Touchanun Komonpaisarn, Chulalongkorn University*

**F325 Valuing the Hidden Economic Contribution of Women in Small-Scale Mining: Empirical Analysis of the Backward-bending Supply Curve**

*Eleanor P. Garoy, Saint Louis University; Gladys M. Navarro, Saint Louis University; Christine P. Manipon, Saint Louis University*

**F048 Assessment on Valuation of Ecosystem Functions and Services Provided by Mangrove Ecosystems in Malaysia**

*Chiam Chooi Chea, Open University Malaysia*

**F304 Hedonic Price Indexes for High Tech Products**

*Iqbal A. Syed, University of New South Wales*

*Abstracts start at Page 255*

7 August 2015

0130pm to 0250pm

Room 836

**Session 7.6 Health Education and Welfare IV**

**Session Chair** Margaret Triyana, Nanyang Technological University

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- F115** **Parents, Migrant Domestic Workers and Children's Speaking of a Second Language: Evidence from Hong Kong**  
*Sam Hak Kan Tang, The University of Western Australia*
- F303** **The Importance of Timing in Education Intervention Program Reforms in Indonesia: A Quasi-experimental Approach**  
*Elan Satriawan, Gajah Mada University; Rizal Adi Prima, TNP2K; Wisnu Setiadi Nugroho, Gajah Mada University*
- F207** **The Contribution of Western Fast Food to the Fast Growing Obesity in China**  
*Meliyanni Johar, University of Technology Sydney; Shiko Maruyama, University of Technology Sydney; Jeffrey Truong, University of Technology Sydney*
- F348** **Love Between Us: Educational Assortative Mating and Expenditure Inequality in Indonesia**  
*Rachmat Reksa Samudra, University of Indonesia; I Dewa Gede Karma Wisana, University of Indonesia*

*Abstracts start at Page 259*

7 August 2015

0130pm to 0250pm

Room 837

**Session 7.7 Environmental Economics II**

**Session Chair** Eden S. H. Yu, Chu-Hai College of Higher Education

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**F563 [Invited] Public-Good Approach to Environmental Economy**

*Eden S. H. Yu, Chu-Hai College of Higher Education; Jai-Young Choi, Lamar University*

**F267 Cournot Competition and “Green” Innovation: An Inverted-U Relationship**

*Luca Lambertini, University of Bologna; Joanna Poyago-Theotoky, La Trobe University; Alessandro Tampieri, University of Luxembourg*

**F323 Climate Change Competitiveness of SMEs in South Korea**

*Jeongin Kim, Chung-Ang University; Hyunjun Park, Chung-Ang University; Hyuna Kim, Chung-Ang University; Kwangrim Choi, BISD*

**F366 Severe Air Pollution and Labor Productivity**

*Teng Li, National University of Singapore; Haoming Liu, National University of Singapore; Alberto Salvo, National University of Singapore*

*Abstracts start at Page 263*

7 August 2015

0130pm to 0250pm

Ballroom III

**Session 7.8      Socio-economics**

**Session Chair**      Kian Teng Kwek, University of Malaya

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**F277      Do Fertility Choices Increase the Survival of Widows? Evidence from a Large Dataset of China, 1791-1909 (CMGPD-LN)**

*Susu Wang, Shandong University*

**F284      An Empirical Analysis of Marital Status in Japan**

*Koji Yasuda, Kobe University; Tomoko Kinugasa, Kobe University; Shigeyuki Hamori, Kobe University*

**F368      Fridays Praying or Sundays Voting: The Effects of Islamic Religion and Democracy in Reducing Income Inequality**

*Saeed Khodaverdian, Frankfurt School of Finance and Management*

**F402      Comparison of Reference Groups in Relative Standard of Living**

*Mengyuan Zhou, Keio University*

*Abstracts start at Page 266*

7 August 2015

0430pm to 0610pm

Room 831

**Session 8.1 Labor and Demographic Economics II**

**Session Chair** Kaiwen Leong, Nanyang Technological University

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**F295 The Decision to Retire Early: Evidence from Private Service Sector in Thailand**

*Kaewkwan Tangtipongkul, Thammasat University; Supachai Srisuchart, Thammasat University*

**F307 Racial Trends in Labor Market Outcomes Pre- and Post-2008 Financial Crisis**

*Jonathan Ng Wei En, Ministry of Manpower; Ee Cheng Ong, National University of Singapore*

**F309 Ownership-related Wage Differentials by Occupation in Vietnamese Manufacturing**

*Kien Trung Nguyen, The University of Danang; Eric D. Ramstetter, Asian Growth Research Institute*

**F350 Modeling the Joint Determination of Labor Market Participation and Educational Attainment in Australia: A Simultaneous Equations System**

*Shamsul Arifeen Khan Mamun, University of Southern Queensland; Khorshed Alam, University of Southern Queensland*

**F525 Women's Human Capital across Sectors in Malaysia: Insights from a Selection-correction Multinomial Logit Model**

*Husaina Banu Kenayathulla, University of Malaya*

*Abstracts start at Page 269*

7 August 2015

0430pm to 0610pm

Room 832

**Session 8.2 In Memorial of Professor Lim Hua Sing**

**Session Chair** Pradumna Bickram Rana, Nanyang Technological University

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**F564 Factors Responsible for Recent Infrastructure Boom in Asia: Results of a Perception Survey**

*Pradumna Bickram Rana, Nanyang Technological University; Wai-Mun Chia, Nanyang Technological University*

**F133 Governance and Investments: A Panel Data Study of the ASEAN Member Countries**

*Fe B. Evangelista, St. Scholastica's College*

**F302 Intra-regional Trade in Intermediate Goods and the Choice of Exchange Rate Regime in East Asia**

*Tuan Khai Vu, Meisei University*

**F276 ASEAN Economic Integration and Its Impact on Skill Inequalities**

*Tri Mulyaningsih, University of Sebelas Maret*

**F332 ASEAN-10 Regional Convergence and the Role of Intra Trade and Spatial Dependence**

*Yanuarita Hendrani, Parahyangan Catholic University*

*Abstracts start at Page 274*

7 August 2015

0430pm to 0610pm

Room 833

**Session 8.3      Macroeconomics and Monetary Economics**

**Session Chair**      Paul Sau Leung Yip, Nanyang Technological University

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- F565**      **[Invited] CRIX - a Crypto Currency Index**  
*Wolfgang Karl Härdle, Humboldt-Universität zu Berlin*
- F058**      **Can We Stabilize the Price of a Cryptocurrency? Understanding the Design of Bitcoin and Its Potential to Compete with Central Bank Money**  
*Mitsuru Iwamura, Waseda University; Yukinobu Kitamura, Hitotsubashi University; Tsutomu Matsumoto, Yokohama National University; Kenji Saito, Keio University*
- F305**      **Assessing the Strength of the Bank Lending Channel in Australia**  
*Eddie Cheung, Open University of Hong Kong*
- F265**      **Understanding Financial Interconnectedness in G4+1 Economies**  
*Kian Teng Kwek, University of Malaya; Cho-Wai Cho, Taylor's University*

*Abstracts start at Page 278*

7 August 2015

0430pm to 0610pm

Room 834

**Session 8.4      Game Theory II**

**Session Chair**      Ernie Teo, Singapore Management University

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**F150      Nash and Cooperative Consumption Taxes When Pollution Affects Consumption**

*Michael Michael, University of Cyprus; Panos Hatzipanayotou, Athens University of Economics and Business*

**F229      Foreclosure Auctions**

*Andras Niedermayer, University of Mannheim; Artyom Shneyerov, Concordia University; Pai Xu, University of Hong Kong*

**F239      Labor Tournament with Sabotage: Equilibrium, Optimal Design and Experimental Evidence**

*Haoming Liu, National University of Singapore; Jingfeng Lu, National University of Singapore; Yohanes Eko Riyanto, Nanyang Technological University; Zhe Wang, National University of Singapore*

**F380      Price Run-ups in Strategic Sequential Bidding for Government Land Auction Sales – Evidence from Singapore**

*Jing Li, Singapore Management University; Ernie G. S. Teo, Singapore Management University*

*Abstracts start at Page 282*



7 August 2015

0430pm to 0610pm

Room 835

**Session 8.5 Trade and Economic Integration**

**Session Chair** Masahiro Kawai, University of Tokyo

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- F570** [Invited]ASEAN Economic Integration, RCEP and TPP  
*Masahiro Kawai, University of Tokyo*
- F110** The Plant-moving Threat as a Motivation for Offshoring  
*Chul-Woo Kwon, Kyungpook National University*
- F210** A Linder Hypothesis for Trade Channeled GDP Co-movement  
*Xiaoping Chen, Nanyang Technological University; Yunong Li, National University of Singapore*
- F294** Eurasian Economic Union: A Challenge for EU Policy Towards Kazakhstan  
*Agnieszka Konopelko, Bialystok University of Technology*
- F398** Tracing and Quantifying Thailand's Linkages to the Global Supply Chain: the Modification of World Input-Output Database (WIOD) and the Applications of Leontief Multiplier and Structural Path Analysis  
*Nattapong Puttanapong, Thammasat University*

*Abstracts start at Page 286*

7 August 2015

0430pm to 0610pm

Room 836

**Session 8.6      Macroeconomics VI**

**Session Chair**      Takashi Kamihigashi, Kobe University

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**F027      On The Efficiency of Commodity Markets - Do Commodities Futures Co-move Excessively?**

*Qin Xiao, University of Hull*

**F165      Predicting Indonesia External Debt Crisis: An Artificial Neural Network Approach**

*Riznaldi Akbar, University of Western Australia*

**F219      Dark Matter and Global Imbalance**

*Chien-Jung Ting, National Chin-Yi University of Technology*

**F529      Asymmetric Effects of Exogenous Tax Changes**

*Syed M. Hussain, Lahore University of Management Sciences; Samreen Malik, New York University - Abu Dhabi*

**F551      Rural-urban Interdependence, Structural Change, and Development**

*Keigo Nishida, Fukuoka University*

*Abstracts start at Page 290*

7 August 2015

0430pm to 0610pm

Room 837

**Session 8.7 Environmental and Energy Economics II**

**Session Chair** Fuhai Hong, Nanyang Technological University

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- F033** **Determinants of Household Choice of Coping Strategy to an Extreme Flood Event in the National Capital Region, Philippines**  
*Jamil Paolo Francisco, Asian Institute of Management*
- F275** **Towards Sustainable Development of Indonesia Extractive Industry**  
*Siwi Nugraheni, Parahyangan Catholic University; Ivantia S. Mokoginta, Parahyangan Catholic University; Difa Dini Asfari, Parahyangan Catholic University*
- F435** **Assessing the effects of Energy Using Products (EuP/ErP) on Thai Electric and Electronic Industry**  
*Monthien Satimanon, Thammasat University; Thasanee Satimanon, NIDA*
- F542** **Troubled Waters? Pollution, Legislation and Child Mortality in India**  
*Quy-Toan Do, The World Bank; Shareen Joshi, Georgetown University; Samuel Stolper, Harvard University*
- F299** **Energy Consumption, Human Capital and Economic Growth in Singapore**  
*Zheng Fang, Nanyang Technological University; Youngho Chang, Nanyang Technological University*

*Abstracts start at Page 293*

7 August 2015

0430pm to 0610pm

Ballroom III

**Session 8.8 Investment, Banking and Finance II**

**Session Chair** Shigeyuki Hamori, Kobe University

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**F341 High Dimensional Non-Linear Interdependence and Portfolio Optimization**

*Shuairu Tian, Kobe University; Shigeyuki Hamori, Kobe University*

**F362 Distillation of News Flow into Analysis of Stock Reactions**

*Junni L. Zhang, Peking University; Wolfgang K. Hardle, Humboldt-University; Sim Kee Boon, Singapore Management University; Cathy Y. Chen, Chung Hua University; Elisabeth Bommers, Humboldt-University*

**F146 Implicit Guarantees, Agency Cost, and Shadow Banking**

*An Wang, University of Maryland*

**F471 Systemic Risk and Crisis Management: A CoVaR Approach**

*Katsutoshi Shimizu, Nagoya University*

**F452 Efficiency on Southeast Asia Banking: Indonesia, Malaysia, Philippines and Thailand**

*Shazida Jan Mohd Khan, Universiti Utara Malaysia*

*Abstracts start at Page 297*

# **ABSTRACTS**

5 August 2015

0130pm to 0250pm

Room 831

**Session 1.1      Microeconomics**

**Session Chair**      Walter Edgar Theseira, Nanyang Technological University

**W096    The Tragedy of the Commons: Logic of Entry and Dynamics of Open Access under Two Scenarios**

*Hiroaki Hayakawa, University of Brunei Darussalam*

Using a bucolic example, this paper elucidates the logic of the tragedy under two scenarios: one in which herdsmen react to the entry of subsequent entrants, and the other in which they are proactive to such entry. The key is the devaluation cost that an incremental use imposes on the value of the cattle. In the first scenario, the stocks owned by a finite number of herdsmen are shown to reach the state of symmetric adjustment equilibrium, which is defined by the equality between an additional benefit and an additional cost which is comprised of the private marginal cost and the induced devaluation cost. But, because a new entrant is not burdened by the devaluation cost in the initial phase of his entry, this equilibrium is constantly disrupted by a new entrant at any adjustment equilibrium, with an entrant increasing his stock and the incumbents being forced to reduce theirs. This process of entry and adjustment continues and passes through a series of adjustment equilibria. In the second scenario, each herdsman controls his herd size by considering how subsequent herdsmen determine their stocks sequentially under the knowledge of the choices made by all preceding herdsmen. In this scenario, the additional benefit equals the additional cost for the last entrant, while the former is less than the latter for all preceding ones. In the first scenario, the herd sizes of all herdsmen approach zero asymptotically while the combined total approaches its maximum, with no profit extracted from the commons, individually or collectively. In the second scenario, the herd sizes are asymmetric in a declining order, with the first entrant possessing the largest stock while the stock of each subsequent entrant being one half of the stock owned by the preceding entrant, and with the extracted profits again vanishing in the long-run. The cumulative profits of the entrants are also compared between the two scenarios with their implications on the pace of depletion. The issue is compounded by demand externalities that arise from economic growth that feeds on population growth.

**W159 Sunk Cost as a Self-disciplining Device**

*Fuhai Hong, Nanyang Technological University; Xiaojian Zhao, Hong Kong University of Science and Technology*

Building on an intra-personal self-signaling game, the paper provides an economic model to show that the sunk cost effect may stem from an attempt to overcome the under-investment problem associated with present bias. The current self may take a costly action (which is a sunk cost for the future self) to signal the individual's ability that motivates his future self-disciplining behaviors. In equilibrium, a higher level of sunk cost gives rise to a higher probability for the individual to continue the project.

**W163 Effort-maximizing Contingent Prize Allocation Rule in Three-battle Contests**

*Xin Feng, National University of Singapore; Jingfeng Lu, National University of Singapore*

This paper studies the effort-maximizing prize allocation rule in three-battle contests. The organizer has a fixed prize budget, and rewards the players contingent on the number of battles they win. The battles can be simultaneously or sequentially played between two same individuals, or each played by different paired players from two opponent teams. A full spectrum of contest technologies in the Tullock family is accommodated. We find winner-take-all is optimal unless the contest is sequentially played between two same individuals and the discriminatory power of the contest technology is in the intermediate range. With sequential battles between two same contestants, when the discriminatory power falls in the intermediate range, the reward strictly increase with the count of wins, and the reward to a single win strictly increases with the discriminatory power but never goes beyond one-third of the total prize. For the same contest, interestingly, when the discriminatory power falls in the high range, a wide span of allocation rules ranging from winner-take-all to proportional division induces the maximal total expected effort. Therefore, the optimal prize allocation rule should in principle give additional award to the grand winner of the whole contest. Our findings rationalize the commonly observed winner-take-all prize structure as well as intermediate prizes in multi-battle contests.

**W381 Mirror Matches: Analyzing Matching Markets with n-Dimensional Preferences**

*Sam Flanders, University of North Carolina at Chapel Hill*

This paper analyzes matching markets where agent types are points in  $R^n$  and agents prefer matches that are closer to them according to a distance metric over this space (horizontal preferences). Given a few additional assumptions (most notably a form of symmetry between the two sides of the market), we show that in the Gale-Shapley stable matching in this environment agents match to a linear function of their own type. We show this result holds both when the division of match surplus is fixed (nontransferable utility), and when agents can bargain over match surplus (transferable utility) given a convexity assumption on the utility function. We also show that the restriction to horizontal preferences is not as onerous as it may seem, as a rich variety of preference structures can be mapped into the horizontal framework, including vertical preferences where all agents agree on the preference ordering of a characteristic. This result can be interpreted as a generalization of Becker's univariate assortative matching to multiple preference dimensions and more general preference structures.



5 August 2015

0130pm to 0250pm

Room 832

**WED**  
**0130 pm**

**Session 1.2      Macroeconomics I**

**Session Chair**      Mun Heng Toh, National University of Singapore

**W077 [Invited] Dynamic Shift to a Basket-peg or Floating Regime in East Asian Countries in Response to the People's Republic of China's Transition to a New Exchange Rate Regime**

*Naoyuki Yoshino, Asian Development Bank Institute; Sahoko Kaji, Keio University; Tamon Asonuma, International Monetary Fund*

This paper analyzes a desirable transition path for East Asian countries given the People's Republic of China's (PRC's) transition to a new exchange rate regime. It attempts to answer two main questions: (i) would these countries be better off shifting to either a basket peg or a floating regime following the PRC's transition to a basket peg regime? (ii) How and when should these countries shift to the desired regime? The paper captures the influence of the PRC's predetermined shift in its exchange rate regime on East Asian countries' decisions regarding their optimal transition policies based on a dynamic stochastic general equilibrium (DSGE) model of a small open economy. Our calibration exercise using Malaysian and Singapore data from the first quarter (Q1) of 2000 to Q4 2012 reveals that a gradual adjustment to a basket peg is the most desirable policy for both countries. A sudden shift to a basket peg is superior to maintaining a dollar peg in Malaysia, but not in Singapore. Finally, a sudden shift to a floating regime is even worse than maintaining a dollar peg in both countries.

**W225 Inflation and Inflation Volatility in Thailand**

*Popkarn Arwatchanakarn, University of Newcastle; Akhand Akhtar Hossain, University of Newcastle*

This paper uses quarterly data for Thailand over the period 1965q3-2013q4 to investigate the bidirectional relationship between inflation and inflation volatility. Inflation volatility is estimated by deploying the Generalised Autoregressive Conditional Heteroskedastic (GARCH) technique. Then, a Granger-causality test is conducted to examine any causality running between inflation and inflation volatility. The empirical results obtained for Thailand are consistent with a number of propositions. Firstly, a rise in inflation raises inflation volatility. This provides support for the Friedman-Ball proposition that high inflation raises inflation volatility. Secondly, there is evidence supporting the Holland proposition that inflation volatility reduces the rate of inflation. Finally, the empirical results obtained by asymmetric GARCH models suggest that inflation shocks have an asymmetric impact on inflation volatility; that is, a positive inflation shock has a larger impact on inflation volatility, measured by the log of the conditional variance of inflation, than the corresponding impact of a negative inflation shock on inflation volatility.

**W073 Inflation Stabilization and Default Risk in a Currency Union**

*Eiji Okano, Nagoya City University; Masashige Hamano, Sophia University; Pierre Picard, University of Luxembourg*

By developing a class of dynamic stochastic general equilibrium models with nominal rigidities and assuming a two-country currency union with sovereign risk, we show that there is not necessarily a trade-off between the prevention of default risk and stabilizing inflation. Under optimal monetary and fiscal policy, comprising a de facto inflation stabilization policy, the tax rate as an optimal fiscal policy tool plays an important role in stabilizing inflation, although not completely because of the distorted steady state. Changes in the tax rate to minimize welfare costs via stabilizing inflation then improve the fiscal surplus, and because of this and the incompletely stabilized inflation, the default rate does not increase as much.

**W330 A Post Keynesian Explanation of Inflation: Evidence from Panel Data**

*Sabri Nayan, Universiti Utara Malaysia*

**WED  
0130 pm**

A classic definition of inflation is that it is a macroeconomic phenomenon of too much money chasing too few goods. Such an explanation is parallel with the view of monetarists that inflation is a monetary phenomenon. Post Keynesian, another group of economists however, posit that inflation is caused mainly by the rate of increase of money wages faster than growth in productivity. A valid explanation of inflation is crucial because it is a prerequisite for its effective control and for avoiding slower economic growth and high rates of unemployment. The present paper attempts to provide a detailed explanation of inflation from the perspective of Post Keynesians. Using panel data approach, the validity of Post Keynesian explanation is tested. Our evidence indicates that inflation in thirty countries in recent years is significantly caused by rapid increase in money wages.

5 August 2015

0130pm to 0250pm

Room 833

**Session 1.3      Chinese Economy I**

**Session Chair**      Kong Yam Tan, Nanyang Technological University

**W279 The Evolution and Distribution of Productivity of Chinese Manufacturing**

*Qu Feng, Nanyang Technological University; Guiying Laura Wu, Nanyang Technological University; Zhifeng Wang, Nanyang Technological University*

Brandt et al (2012) try to quantify the contribution of total factor productivity (TFP) to the economic growth of China with the firm level data of manufacturing. The way used by Brandt et al (2012) to calculate the growth rate of capital stock may be misleading. Using the same dataset, after some adjustments to the calculation of growth rate of capital stock, the growth rate of TFP is estimated to be 3.14%, which is slightly larger than 2.85% given by Brandt et al (2012). Second, the growth rate of TFP of state-owned enterprises is found to be not significantly lower than those of other ownership types. Third, we find that the pattern on productivity across region is that the most productive are firms in the coastal region, followed by those in middle region and west region. The least productive firms are those located in the northeast. Fourth, we also find that the firms that do international business have higher productivity. Fifth, the productivity of firms that exit is 5.29% lower. But in the balance panel, there are also “exiting” activities of firms, shifting from one industry to another. These firms have higher productivity and growth rate, which is new to literature.

**W081 The Dynamics of China's Trade Composition and Determinants of the Trade Balance: A Comparison across Selected Partner Countries**

*Biswajit Banerjee, Bank of Slovenia; Xin Li, International Monetary Fund; Yingying Sheng, Goldman Sachs; Haiyan Shi, International Monetary Fund;*

In this paper, we compare the dynamics of China's trade composition and determinants of trade balance with USA, EU, and India during 1999-2011. The main conclusions are that the real exchange rate and structural changes in trade composition have been the principal drivers of China's trade balance in recent years. In line with the majority of earlier studies, we find that real exchange appreciation reduces the trade surplus. The sensitivity varies across countries. However, the large persistent trade surplus also reflects the fact that China's exports are rising up the skill ladder and imports are moving down the skill ladder.

**W116 Overlapping-generations Model and the Optimal Household Savings Rule in China**

*Kevin C. Chua, Shandong University*

Mainstream economic theories of savings such as the Life Cycle Theory and Permanent Income Hypothesis generate predictions that are difficult to reconcile with the Chinese experience. The prevailing thought is that young people who anticipate higher future income should be borrowing, instead of saving; while old people who are in their retirement should be spending, instead of saving. However, data show that in China, the savings rate of households has increased among all the demographic profiles including both the young and the old. This paper constructs a model of household savings based on an overlapping-generations (OLG) model. The OLG model allows for the possibility of interactions between two generations: the parents and the children, and is thus a suitable framework to capture family saving dynamics in China. In this model, the children receive endowments from their parents at the beginning and share their income with their parents at the end, as a form of self-insurance. Money endures through multiple periods, and overall utility is the sum of the utilities of both generations. This paper attempts to derive the optimal decision rule and tests its fit with available Chinese household savings data.

**W136 Oil Price and Exchange Rate of China: A Nonlinear Granger Approach**

*Songran Li, Sichuan University; Degong Ma, Sichuan University;*

We investigate the possible nonlinear causality relationships between crude oil price and RMB exchange rate which usually ignored by previous researches which are mainly focused on the traditional linear side. As shown in many researches recently, the nonlinear structure of energy price has been widely considered. To fill this gap, we employ nonlinear causality test to examine the Granger relationships between the above two series. Our results indicate that there exists the unidirectional nonlinear causality running from the crude oil price to RMB exchange rate from July 2005 to March 2013.

5 August 2015

0130pm to 0250pm

Room 834

**WED**  
**0130 pm**

**Session 1.4** Health, Education and Welfare I

**Session Chair** David Reisman, Nanyang Technological University

**W124 Teaching Management in Asia and Africa**

*Yuki Higuchi, Nagoya City University; Tetsushi Sonobe, Nagoya City University*

This paper analyzes panel data collected from small garment enterprises before and after experimental interventions in Tanzania and Vietnam to examine the impacts of management training featuring the Kaizen approach to production management. In both study sites, the training programs improved entrepreneurs' management capacity and their awareness of the importance of learning about management although the two study sites have considerably different business environment. The impact on management capacity remained significant two or three years after the interventions. Although the training impact on business performance was not significant shortly after the training, it became significant later in both sites.

**W078 An Application of Data Envelopment Analysis Bootstrap to Examine Sources of School Efficiency in Urban and Rural Areas**

*Sui Chin Tan, Universiti Malaysia Sabah; Yii Siing Wong, Universiti Malaysia Sabah; Vincent Pang, Universiti Malaysia Sabah; Chong Mun Ho, Universiti Malaysia Sabah*

From an economic perspective, rural areas are often associated with lagging in terms of efficiency. Similar situations happen in education. This article intends to examine school efficiency by using a non-parametric method, together with bootstrap truncated regression in the second stage, to observe the difference in terms of efficiency in urban and rural areas. In order to understand the sources of efficiency, most previous studies used regression together with DEA scores in the second stage. However, the second stage analysis is believed to have violated the basic assumption of regression. Thus, the use of bootstrap regression in the second stage analysis is more suitable. At the same time, this study used additional variables in the second stage, i.e. tuition and Excellent Principle. From a policy perspective, this study has showed potential efficiency improvement in inefficient schools. Variables that show statistically positive influences are different for these two areas. Students' initial ability was found to be significant and positive in both areas, while parents' education and excellent principal were found to be important too. For urban areas, tuition shows positive influence but school size shows negative influence on school efficiency.



**W499 Selective Universities and Intergenerational Mobility**

Sunha Myong, Washington University in St.Louis

WED  
0130 pm

In this paper, I study how the presence of selective universities affects intergenerational mobility. To answer this question, I estimate the wage elasticity of the family income at different ability levels, and then quantify how this elasticity changes after I switch all selective universities into nonselective universities. I found that for students with median ability level, the presence of selective universities has only negligible effect on the wage elasticity of the family income. However, if I look at top 10% ability group, the effect is significantly negative, and the extent is larger for low-income students. In particular, if the family income increases from 40,000 to 80,000, introducing selective universities results in 0.20 to 0.03 reductions in the wage elasticity of the family income. The main reason for this negative effect is mainly driven by student's application decision for selective universities, because family income also increases the outside option. On the other hand, changes in student's high school curriculum choice alone in response to the introduction of selective universities actually increases the wage elasticity of the family income by 8~9%. Therefore, the presence of selective universities increases the intergenerational mobility among top ability students, while ignoring student's human capital accumulation during high school would overstate this effect.

**W234 Income and Education as the Determinants of Anti-corruption Attitudes: Evidence from Indonesia**

Anita K. Zonebia, Universitas Padjadjaran; Arief A. Yusuf, Padjadjaran University, Heriyaldi, Universitas Padjadjaran

Level of economic development has been found to be among the strongest determinants of corruption level in cross-country studies. Those studies use income per capita as a measure of level of development and found that higher level of corruption is associated with lower level of income. We argue that, at any given income level, education is also a very important determinant of the level of corruption and failing to include education may bias or over-estimate the importance of income. We estimated an empirical model of individual's attitude toward anti-corruption using a large sample of 9,020 individuals that represent Indonesian population and find that the effect of income (proxied by expenditure) is either weakened or eliminated when we control for the level of education. The effect of education is also found to exhibit a non-linear pattern, which implies that investing in education will have increasing returns in the form of anti-corruption attitude. This finding supports the view that increasing access to education is an effective measure of reducing corruption norms particularly in developing countries.

5 August 2015

0130pm to 0250pm

Room 835

**Session 1.5      Capital Flows and Exchange Rate I**

**Session Chair**      Peter Wilson, Singapore Management University

**W244    Empirical Examinations of the Feldstein-Horioka puzzle : Common Factor Panel and Interval Estimation Approach**

*Isamu Ginama, Hiroshima University; Kazuhiko Hayakawa, Hiroshima University; Takahiro Kanmei, Hiroshima University of Economics*

The Feldstein-Horioka puzzle is empirically examined using the national data of the twenty four OECD countries, and the regional data of Japan, Indonesia, and the Philippines. The common factor panel methods are applied to the OECD countries, Japan, and Indonesia. A different method to remove the influences affecting both savings and investment rates simultaneously except intranational capital flows by regression analysis is used for the Philippines due to the limited availability of the regional data. The statistically significant evidence for the existence of the puzzle is represented for OECD countries, but evidence in accord with mobile intranational capital flows is obtained for the regional data of Japan, and Indonesia. The bootstrap BCa confidence intervals of the correlation coefficient between savings and investment rates reveal the similar results for the regional data of the Philippines.

**W120 Estimating Outward FDI Flows under the Heterogeneous Firm Model:  
The Case Study of East Asia**

*Kornkarun Cheewatrakoolpong, Chulalongkorn University; Panutat Satchachai, Chulalongkorn University*

**WED  
0130 pm**

When studying the determinants of bilateral outward FDI flows, one of the important issues is asymmetry in the bilateral flows. Precisely, many country pairs may not have outward FDI flows, and some may even attain negative flows. Previous literature treats zero or negative outward FDI flows as missing values which may cause bias in the estimation of outward FDI's determinants. In this paper, we revise the heterogeneous firm model proposed by Helpman, Melitz and Rubinstein (2008), and apply it to the outward FDI. To find the determinants of the outward FDI flows, we employ a Heckman two-step estimation procedure. First, we start by determining the firms' decision if they will invest abroad when their productivities are high enough to overcome the fixed cost of outward investment. The institutional variables such as FDI openness and trade openness policies of the host countries, and a corruption level are used to represent these fixed costs. In the second stage, we include productivity threshold to capture unobserved firm heterogeneity and the inverse Mills' ratio to capture the sample selection bias in the augmented gravity equation. Other determinants such as market and technology variables are also included to capture the variable costs of investment. Using the bilateral outward FDI flows between 15 countries in South East Asian and East Asian countries during 2000-2013, we show that the traditional augmented gravity estimations are biased compared to the Heckman two-step estimations. This implies the importance of including firm asymmetries and sample selection bias to understand outward FDI flows across country pairs, particularly in outward FDI flows between developed and developing countries.

**W240 Spillover Effects of Foreign Direct Investment on Domestic Manufacturing Firms in Thailand**

*Paitoon Wiboonchutikula, Chulalongkorn University; Chayanon Phucharoen; Chulalongkorn University; Nuchit Pruektanakul; Chulalongkorn University*

This study investigates spillovers of the FDI in horizontal, upstream, and downstream industries on domestic firms. First, we measure total factor productivity (TFP) and estimate stochastic production frontier to find technical efficiency of firms in the manufacturing sector, using the 2012 industrial census conducted by the National Statistical Office. Next, we examine impacts of the FDI and other factors on the TFP and technical efficiency of domestic firms separated by group, namely in the labor-intensive and in the capital and technology-intensive industries. The results show that the FDI in horizontal industries contributed positively to both the TFP and technical efficiency of all firms. While the FDI in upstream industries did not show any positive results, the FDI in downstream industries showed positive and significant spillover effects on firms in the capital and technology-intensive industries. Firm-specific characteristics such as age, size, availability of imported raw materials, industrial estates location, and R&D activities all had positive effects on firms' TFP and technical efficiency. Although export capability had a positive impact on firms in the capital and technology-intensive industries, the effect was insignificant in the labor-intensive ones. Our findings imply limited spillover effects of the FDI on domestic firms but highlight favorable effects of the openness policy (affecting availability of imported raw materials and exports), infrastructural investment (available in the industrial estates), and R&D activities of firms. Therefore, FDI promotion efforts should be supported by favorable trade policy for the spillovers to domestic firms to be effective.

**W412 How do Remittances Affect Food Consumption Basket in the Philippines?**

*Maria Luisa Valera, University of the Philippines Los Banos*

This paper examines the relationship between remittances and household entire food basket expenditure in the Philippines using cross-section data from the 2009 Family Income and Expenditure Survey (FIES). Unlike previous studies that analyze household food consumption based on cross-section data, this paper specifically investigates the budget share equations for eleven broadly defined food categories while controlling for a number of household characteristics variables. Employing Tobit regression approach, the results indicate that the share of food expenditure for cereals and fish products is lower for household receiving international remittances compared to households who do not receive remittances from abroad.

5 August 2015

0130pm to 0250pm

Room 836

**WED**  
**0130 pm**

**Session 1.6      Experimental and Behavioral Economics**

**Session Chair**      Jack Knetsch, Simon Fraser University

**W166    The Effect of Confirmation Bias on Investors' Overconfidence Bias and Its Solutions: An Experimental Study**

*Phaik Nie Chin, Universiti Sains Malaysia*

Traditional economic theory manifested in Efficient Market Hypotheses (EMH) assumes that investors are always rational by incorporating all relevant information into the decision making process to generate optimal financial outcomes. However, in many occasions, investors do not act as postulated by Expected Utility Theory and EMH. Investors tend to make decision based on their intuitions that lead to cognitive biases such as confirmation bias. Confirmation bias causes investors to be miscalibrated and thus, display overconfidence in their decision making in securities market. This study aims to first, examine the relationship between confirmation bias and overconfidence bias. Second, to examine the effectiveness of contradicting and feedback mechanism to minimize the overconfidence bias among individual investors. The degree of overconfidence bias such as trading volume and price prediction error is deduced from a simple trading mechanism and bias score is collected through a questionnaire in laboratory experiments. The results show that subjects with confirmation bias tend to have higher bias score, trading volume and price prediction error compared with those who are not. Based on the results from solution mechanisms, feedback mechanism is more effective in reducing the overconfidence bias in individual investors.

**W119 Reciprocity and Altruism: Intra-social Preferences**

*Jingping Li, Shandong University; Yohanes E. Riyanto, Nanyang Technological University*

In this paper, we evaluate subject's budget allocation between himself and two different recipients. In particular, we examine how an additional option of social preferences would affect the existing one. We find that, on one hand, subjects have a fixed budget between oneself and the others, regardless who the others are. On the other hand, different others are not treated differently. In other words, altruism and reciprocity, as two different types of social preferences, are of similar level of strength in motivating individuals to give. In addition, there is no strong evidence on the trade-offs between these two forms of social preferences.

**W426 Pro-drop and Social Preferences: An Experiment on the Effect of Languages on Economic Decision-making**

*Tai-Sen He, Nanyang Technological University*

How does the language we speak affect the decisions we make? In this present study, we focus on the effect of pronoun-dropping on social preferences. Subjects' social preferences are elicited using the social value orientation (SVO) task developed by Murphy et al (2011). We directly manipulate the languages and grammatical structures the subjects are exposed to during the experiment to identify the causal effect of languages and grammatical structures on decision-making. Using the English-Mandarin bilingual subjects in Singapore, we found that subjects are more pro-social when they are instructed in Chinese than in English. We further drop the pronoun "I" in the Chinese treatment sessions. Surprisingly, we found that subjects appeared to be more pro-social in the pronoun-dropping treatment than the non-pronoun-dropping treatment sessions, suggesting the effect of grammatical structures per se.

**W510 Asset Markets with Insider Trading Regulations: An Experimental Analysis**

*Edward Halim, Nanyang Technological University; Yohanes Eko Riyanto, Nanyang Technological University*

**WED  
0130 pm**

We investigate the desirability properties of a compulsory post-trade insider trade disclosure protocol in the securities market, and whether the interaction with a restrictive holding rule produces ameliorative effect on asset price formation in an experimental setting. Information of transactions involving traders with better information on the dividend state is revealed to the public in the continuous double auction market. Our results show that greater transparency moderates asset bubble. Of particular interest is the lack of insiders' attempts to move market price beyond the fundamentals, as evidenced by the higher rate of accurately priced executions. Looking into changes in market liquidity and insiders' market power, we attribute the constraints to self-interest pursuit to a growing presence of competition for assets from uninformed traders. We extend our study by requiring insiders to hold recently purchased securities for two trading periods before reselling them. Our findings demonstrate the mitigating effect of restrictive rule on the improvement in the market quality. The prolonged and aggravated mispricing originates from the departure of traders' willingness to engage in price stabilizing transactions. Increasing insider attempt to extract rent for forgone capital gain ‡flexibilities is observed along with a contraction in market trading volume, suggesting a weakened competitive force as a contributor to the rise of speculative strategies. The experiment outcomes have important implications not only for the novel design of informed traders and transparency protocol in SSW market model, but more importantly for how we might think about the role of holding rule in a more transparent environment.

5 August 2015

0130pm to 0250pm

Room 837

**Session 1.7      Financial Economics I**

**Session Chair**      Weihong Huang, Nanyang Technological University

**W157    A Comprehensive Study to Out-of Sample Equity Premium Prediction**

*Cindy S.H. Wang, Universit'e catholique de Louvain, National Tsing Hua University and National Taiwan University; Shui Ki Wan, Hong Kong Baptist University; Fang-I Liao, National Tsing Hua University*

This paper approaches an old question in a comprehensive way from the econometricians' point of view: are stock returns predictable? Based on numerous financial and macroeconomic variables, we focus on the successful and robust analysis of out-of sample equity premium using several modern econometrics estimations at three different data frequency. The estimation methodologies include a class of generalized Cochrane-Orcutt autoregressive (GCO-AR) estimations and the least absolute deviation (LAD)-related estimations, as well as combination forecasts with various combination weights. Series that have been considered in Goyal and Welch (2008) and other literature are reevaluated. In fact, all empirical results support the usefulness of our modern estimation methodologies, indicating that many predictive regressions estimated by these methodologies outperform the historical average returns in terms of the out-of-sample gains. More importantly, when using the dataset considered in Rapach et al. (2010), the LAD estimation of regressions of equity premium deliver statistically and economically significant out-of-sample gains in comparison to the historical average equity premium forecasts. Although Rapach et al. (2010) and Campbell and Thompson (2008) suggested the need of combining forecast frameworks and restricting on the signs of coefficients and return forecast respectively, these practices are not necessary in LAD estimation.



**W312 Determinants of Corporate Bond Issued in East Asia: A Demand Side View for Asian Bond Market Development**  
*Fumiharu Mieno, Kyoto University; Tran Thi Van Anh, Kobe University*

WED  
0130 pm

This paper examines the current bond market development in ASEAN countries. It is found that external-financing has been generally inactive in corporations operating in the region; commercial banks have tended to weaken their commitment to manufacturing sector, and major firms, particularly foreign firms have been unwilling to participate in the securities market. It also discusses the function of bond-financing by comparing two fundraising methods: financial intermediation and equity finance. The finding suggests that the development in the bond market is very much affected by factors from the demand side rather than the supply side of the fund. The total bond outstanding has shown substantial expansion in most countries. However, it has been mostly led by the issuance of public bonds including of state-owned enterprise. In bond issuance by private sector, there was extreme uneven distribution by industrial sectors; main issuers were the firms of infrastructure related sector, and financial sector, and the firms in manufacturing sector was not a majority. Based on these descriptive observations and inference, the paper estimates the determinants of bond issuing with private firms' micro data in case of Thailand, Malaysia and Korea under the model on the information cost and the demand for long-term fund, finding that the demand factor is binding, while the information cost is minor, and that the demand for fund is relatively large in infrastructure and non-bank financial sectors. The conclusion is induced that the fund demand factor by real sector may be a key for further bond market development.

**W430 Modeling Stock Price Volatility with Habit Formation and Learning**

*Pisut Kulthanavita, Thammasat University; Varit Tangvijitsakulb,  
Thammasat University*

This paper studies a variety of stylized asset-pricing facts of the U.S. stock market. We introduce internal habit formation developed by Abel (1990) and a learning approach developed by Adam, Marcet and Nicolini (2015) to the Lucas (1978) asset-pricing model. Our approach deviates from rational expectations (RE), which is a common practice in the literature, by assuming that agents have imperfect knowledge about the pricing function. Under an environment with learning, agents hold subjective probability beliefs about all payoff variables, such as prices (an endogenous variable) as well as the dividend and income processes (exogenous variables). Given these prior beliefs, agents then maximize utility subject to their budget constraints. The agents therefore update their posterior beliefs over time as new information becomes available. We use the method of simulated moments (MSM) to estimate the model. Overall, the model under learning with habit formation outperforms the model under RE. Our model explains four stylized facts of the U.S. stock market better than the model under learning without habit formation. These four stylized facts are about the price-dividend (PD) ratio volatility, the excessive return volatility, the equity premium and the dividend behavior. Specifically, we find that the model under learning with habit formation provides the higher equity premium compared to the model under learning without habit formation. In addition, an increase in the degree of risk aversion induces higher volatility in the stock market. Agents then require a higher equity premium as a compensation for holding stocks relative to bonds

**W289 Complex Interactional Dynamics of Herding and Contrarian Investors**  
*Weihong Huang, Nanyang Technological University; Lyon Loh, Nanyang Technological University*

**WED**  
**0130 pm**

This paper models the interactional dynamics between herding and contrarian behavior of investors in financial markets using a computational agent based approach. Utilizing a cellular automata agent based model with heterogeneous agents, herding and contrarian investors make their investment decisions based on interactions with other investors in a regular network. The agents in our model determine their investment decisions based on the actions of other agents in their network neighborhood, which in turn are based on the actions of others in their respective network neighborhoods, synonymous with the strategy in a Keynesian Beauty Contest. The model succeeds in replicating rich and complex characteristics of financial markets such as chaotic price fluctuations, punctuated equilibriums, fat tails, extreme values, market cycles, non-periodic bubbles and crashes, switching regimes of bull and bear markets.

5 August 2015

0130pm to 0250pm

Ballroom III

**Session 1.8      Real Estate and Housing Economics**

**Session Chair**      Laura Wu, Nanyang Technological University

**W422 Discounting over the Very Long Run: Evidence from Singapore's Property Market**

*Eric Fesselmeyer, National University of Singapore; Haoming Liu, National University of Singapore; Alberto Salvo, National University of Singapore*

Policymakers and researchers are finding it difficult to decide on the proper discount rate to use to evaluate carbon abatement strategies. One problem is the lack of data indicating how households actually value the far-off future. We take advantage of the co-existence of leasehold and freehold properties in Singapore to estimate such discount rates. Leasehold land and the housing units built on it revert back to the lessor, usually the government, after the lease expires either in 99 years or 999 years. A freehold property never reverts back, remaining the owner's property in perpetuity. Differences in prices paid for properties of different tenure lengths allow us to estimate discount rates using non-structural and structural models. We find that a freehold housing unit sells for about 15 to 20% more than a 99-year leasehold property and for about 3.5 to 5% more than a 999-year leasehold property. Assuming that the discount rate is constant over the length of tenure, the price premium of freehold properties over 99-year leasehold properties suggests an annual discount rate of 1.8%. The price differential between a 999-year leasehold and a freehold property suggests a discount rate of about 0.2%.

**W437 Property Dispositions and REIT Credit Ratings**

*Qing Li, Singapore Management University; Seow Eng Ong, National University of Singapore; Masaki Mori, National University of Singapore*

This paper investigates property dispositions' effect on wealth of debt holders of real estate investment trusts (REITs) using credit rating to proxy firm credit risk and creditor wealth. We find property dispositions have a positive effect on REIT credit ratings. We further investigate underlying channels for this positive effect and test three hypothesized channels that link the outcome of real estate asset divestiture to components of REIT credit rating criteria. Results show that positive disposition effects on credit ratings are due to increased geographic focus of REIT property portfolios after dispositions. Our study provides evidence on wealth effects of asset transactions from creditors' perspective.

**W446 Has Singapore Experienced Housing Bubbles?**

*Inyeob Ji, Dongguk University; Ernie G. S. Teo, Singapore Management University*

We utilize a novel method from Phillips, Shi and Yu (2013) to investigate whether Singaporean real estate markets have experienced bubbles. This method involves a doubly recursive right tailed unit root test which can be used for real time policy decisions. We find that Singaporean real estate markets have experienced negative bubbles during the Global Financial Crisis. We also demonstrate that the semi house market and the central office market lead Singaporean residential housing markets and commercial markets respectively. Additionally it is found that these two leader markets affected growth of other markets positively in normal periods and negatively during the Global Financial Crisis.

**W395 Evaluating Singapore's Housing Policies: A Bounds Testing Approach**  
*David Lee, Singapore Management University; Taojun Xie, Singapore Management University*

The Singapore housing market is unusual in the dominance of privately-owned government-built housing coexisting with openness to foreign investments in the private housing sector. Recent rapid population increases in a low interest rate and high global liquidity environment has resulted in accelerated house prices increases in Singapore. The Singapore government responded with several consecutive rounds of measures to stabilize housing prices. This provides a unique opportunity to study the degree of success of various government measures to maintain house price stability. In this paper, we first construct a set of indices for the government's cumulative efforts in stabilizing the housing market, following Zhang and Zoli (2014) and based on the government policy statements from June 1981 to December 2013. We then test for cointegrating relationships between the housing policies vis-à-vis property price, transaction volume and sales value using Pesaran (2001) bounds test for cointegration. Our findings are as follows. First, Singapore's housing policy has significant counter-cyclical impacts on property transaction volume and sales values in both the long-run and the short-run. Second, cooling measures initiated in September 2009 have been effective at least in the short-run horizon. Third, different types of housing policy have different effectiveness: debt-to-income ratio measures are effective in the long-run, while capital gain tax, loan-to-value ratio and Central Provident Fund measures are effective in the short-run horizon.

5 August 2015

0500pm to 0600pm

Room 831

**Session 2.1 Firm Behavior and Firm Strategy**  
**Session Chair** Yew Kwang Ng, Nanyang Technological University

**WED**  
**0500 pm**

**W167 Net Neutrality and Asymmetric Platform Competition**

*Marc Bourreau, Telecom ParisTech; Romain Lestage, Central University of Finance and Economics*

In this paper we analyze the interplay between access to the last-mile network and net neutrality in the market for Internet access. We consider two Internet service providers (ISPs), which act as platforms between Internet users and content providers (CPs). One of the ISPs is vertically integrated and provides access to its last-mile network to the other (non-integrated) ISP. We show that a lower access price may increase the ISP's incentives to charge CPs positive termination fees, i.e. to deviate from net neutrality.

**W475 Earning the Grade or Just Window Dressing? The Effects of Information Disclosure on Restaurant Hygiene Quality**

*Jialiang Zhu, George Washington University*

This paper explores New York City's new mandatory information disclosure policy of posting hygiene quality grade cards in restaurant windows. With this new policy, restaurants which do not earn an A grade (the highest grade) upon the first inspection, are given a second opportunity for a re-inspection to improve their hygiene condition before grade card posting is required. The paper uses an ordered logit model with a panel dataset and finds evidence that restaurants exploit this re-inspection rule. Specifically, while the likelihood of receiving an 'A' grade in the initial inspection is only about 45%, as many as 80% of restaurants achieves an 'A' grade after the second inspection. A theoretical model is developed, which predicts that chain restaurants will free ride on the 'A' grade threshold. This prediction is then confirmed empirically. Additionally, analysis of score distributions between neighborhoods shows that it is likely that there are potential kickbacks paid from restaurants to inspectors to earn an 'A' card. The goal of launching this new policy was to enable consumers to better observe restaurant hygiene conditions so that restaurants would have greater incentives to improve them. However, there does not appear to be any genuine hygiene quality improvement in New York City since these new rules were put in place.

**W113 Ambiguity Between Pirate Incentive and Collective Desirability within Semi-delegation Pattern**

*Kai Zhao, Huaqiao University; Wanshu Wu, Huaqiao University*

We extend the literature on strategic delegation to a model with a semi-delegation structure. We investigate how the level of spillovers and the degree of product differentiation affect the owner's decision, taking symmetric & asymmetric into account. It is found that owners face a prisoner's dilemma when the level of spillovers is very small or the products are sufficiently differentiated, and this paper highlights the conflict between individual and collective rationality. Concerning the behavior, managers act less aggressively on the market where there are delegated-firms than on the market where entrepreneurial firm and managerial firm coexist. It is found whether to delegate or not demonstrably depends on the extent of spillovers. The influence of product heterogeneity, compared to spillovers, has no prominent impact on the firm's decision. Furthermore, we highlight the existence of the ambiguous areas. In these areas, delegations make firms profitable, but they cannot generate desirable welfare. Whether the delegation leads to an individual-collective unanimity or an individual-collective conflict, depends on the two extrinsic factors: the level of spillovers and the degree of product differentiation



5 August 2015

0500pm to 0600pm

Room 832

**Session 2.2      Economic Thought**

**Session Chair**      Shinichi Ichimura, Kyoto University

**WED**  
**0500 pm**

**W567 [Invited] The Clash of Civilizations or the Clash of Nations?**

*Shinichi Ichimura, Kyoto University*

The Clash of Civilizations attracted an enormous attention among the political arguments in Japan as well as all over the world, perhaps because it gave an impression that the book correctly predicted the coming of Iraq and Afghanistan wars. The book was a development of the author's sensational article in the Foreign Affairs, July 1993. His straightforward arguments in the article caused so many criticisms that he considerably modified and mitigated the original assertions. I myself recognized that the article had proposed an extremely important problem on the world affairs after the cold war. I noticed, however, that as he had been so in his earlier writings on other subjects, he sharply pointed out a few important problems and their analyses, but at the same time, he committed some mistakes of bias and exaggeration. To my limited knowledge, he wrote the following two outstanding books and made great contributions in political science: *The Soldier and the State*, 1957, and *Political Order of Changing Societies*, 1968. The former dealt with the civilian control in the United States, whereas the latter argued on the issues of political instability caused by the success of economic growth in many developing countries. He based his arguments on the observations in Latin America. In both studies, his sharp proposal of important issues was very impressive but his methods and logics were imperfect and observations were not universal historically and regionally. His conclusions were biased or not necessarily right.

For instance, he argued that economic growth caused income in- equality and lead to social instability in Latin American countries. When, however, James Morley and I studied the Asian development, the contrary was true. I cannot help feeling that he did not know the real circumstances in Asia even in this study of the clash of civilizations. I would take up some issues and critically review the book and his perspectives on the likely challenge to the United States in the 21st century.

**W512 [Invited] Institutions and Gravity Model: The Role of Political Economy and Corporate Governance**

*Mehmet Huseyin Bilgin, Istanbul Medeniyet University; Chi Keung Marco Lau, Northumbria University; Giray Gozgor, Dogus University*

Using panel data on 149 countries this paper aims to investigate interrelationships between exporting performance, investor protection, employment protection, corporate governance, and political environments. Our model predicts that stronger democratic political institutions encourage exports. It is also found that stronger rule-based corporate governance imposes positive impact on exports performance. Also note that stronger employee protection, and therefore rigid labor regulations can distort the exporting decision of firms. Stronger shareholder protection tends to associate with lower exports, probably attributed to lower innovative activity. We interpret these results as an indication that (i) countries with higher quality of institution suffers from less formal and informal trade barriers, and making international trade relations more easy, (ii) both employee protection and shareholder protection, on the other hand, trivialize the country's export.

**W516 [Invited] Into the Age of Non-economics**

*Joergen Oerstroem Moeller, Institute of Southeast Asian Studies, Singapore Management University*

Into the age of non-economics. Most economic concepts such as the market, competition, flexibility, pricing of production factors and consumption theory no longer reflect the reality of the contemporary situation. The current economic model and political system form a synthesis of fiduciary economics and privilege political systems. The exponential rise in material wealth amassed over the industrial age is unsustainable when figuring in the availability of resources. Even more interesting is how it may run counter to human instincts, our gene structure, and how the mind-set and behavioral pattern are forged. As the economy and society evolves, combining in-depth knowledge across various disciplines is crucial to furthering our understanding of the world.

5 August 2015

0500pm to 0600pm

Room 833

**Session 2.3 Econometric and Statistical Methods and Methodology I**

**Session Chair** Hsiao Cheng, University of Southern California

**WED**  
**0500 pm**

**W212 Revisiting an Old Issue by Modern Econometrics Analysis: Exchange Rate Risk in the US Stock Market**

*Chi Fang Li, National Tsing Hua University; Cindy S.H. Wang, Universit'e catholique de Louvain, National Tsing Hua University and National Taiwan University; Andrew Y.M. Xie, University of Southern California*

This paper focuses on revisiting an old issue in a comprehensive way from the econometricians' point of view: the pricing of exchange rate risk in the U.S. stock market. We analyze the relation among the cross-section of U.S. stock returns, foreign exchange risk and interest rate during the period from 1997 to 2014 at the firm level. The methodologies to estimate the regression coefficients of the change in the value of the firm on the changes in the exchange rate and the interest rate are the panel data models that robust to the presence of various forms of error cross-section dependence. In particular, we not only examine the exchange rate exposure and sensitivity of the interest rate to U.S. firm stock returns in 396 samples in total, but also investigate those patterns to stock returns of 10 specific industries in U.S. market by which way we may detect the direction of capital flows. Furthermore, we divide the whole sample duration into three periods according to two well-known financial crises occurred in 2001 and 2007. All empirical results provide the evidence on the usefulness of our methodologies and show the significant firm-specific foreign exchange and inter rate sensitivity. More importantly, our results as well indicate (1) to which industry the capital flows go before and after crises (2) which currency play a more important role in the sensitivity to U.S. firm stock returns before and after crises.

**W498 Controlling for Multilateral Resistance Terms in Linearized Trade Gravity Equations without Spatial Econometrics**

*Peter H. Egger, ETH Zurich; Kevin E. Staub, University of Melbourne*

This paper studies linearized spatial structural gravity models of bilateral trade à la Behrens, Ertur and Koch (2012). We show that these models do in fact not require spatial econometric methods for estimation. This result follows from the nature of the specific spatial weights matrix, and from the exporter- or importer- specific nature of some regressors and the approximation error. All structural model parameters are identified from a linear regression that uses a spatial lag of the dependent variable as a control function.

**W359 Limiting Distribution of Common Break Estimator in Panels**

*Qu Feng, Nanyang Technological University*

When structural breaks are present due to new policies or technological shocks, ignoring structural breaks may lead to inconsistent estimation and invalid inference in panel data models with a long time span considered in the literature. Baltagi, Feng and Kao (2015) extend Pesaran's (2006) work on common correlated effects (CCE) estimators for large heterogeneous panels with a general multifactor error structure by allowing for unknown common structural breaks. The least squares method proposed by Bai (1997, 2010) is applied to estimate the common change points, and the consistency of the estimated change points is established, without reporting the limiting distribution of change-point estimator in that paper. This paper derives the limiting distribution of change-point estimator under fairly general conditions.

5 August 2015

0500pm to 0600pm

Room 834

**Session 2.4 In Memorial of Anthony Chin**

**Session Chair** Michael Li, Nanyang Technological University

**WED**  
**0500 pm**

**W253 Impact of Transport Infrastructure Investment on International Competitiveness**

*Joko Purwanto and Christophe Heyndrickxa, Transport & Mobility Leuven, Belgium; Jan Kielb, Panteia, the Netherlands; Ofelia Betancorc, M. Pilar Socorro and Aday Hernandezc, Fedea, Spain; Juan Luis Eugeniold, Palmas de Gran Canaria, Spain; Barbara Pawlowskae and Przemyslaw Borkowski, University of Gdansk, Poland; Ralf Fiedler, Fraunhofer CML, Germany*

The objective of getting out of the crisis together with the urgent need to remain highly competitive especially against the new emerging economies has made Europe's competitiveness and economic performance fundamental issues. European Commission's Transport White Paper 2011 has summarized the main objective of European transport strategy which is to help establish a system that underpins European economic progress, enhances competitiveness and offers high quality mobility services while using resources more efficiently. Given the above challenges and strategy setting, it is obvious that stronger role and bigger contribution of the transport sector in the improvement of European economic growth and competitiveness are highly expected. In consequence it is also essential first to clarify the relationship between the transport sector and the economic growth and the competitiveness and second, to elaborate a working framework so that transport policy intervention can effectively improve European economic growth and competitiveness. The aim of this paper is twofold. First it aims at clarifying the relationship between transport infrastructure investment and its wider economic impacts, namely competitiveness and economic growth in particular and second, at synthesizing some proposed improvement of the methodology used to assess the impacts of investment in transport infrastructures especially on competitiveness and economic growth.

**W301 Road Charging in Multi-level-systems: A Political-economic View of National Decisions under Consideration of the EU-level**

*Sonja Krause, University of Bremen; Melanie Nofz, University of Bremen; Tobias Peters, University of Bremen*

In 2013, next to federal funds and the user financing through trucks the infrastructure in Germany was supposed to be financed through an infrastructure fee for all users of the German federal highway system. However, no car owner in Germany shall be debited greater than without an infrastructure fee. Furthermore, the fee has to be formulated consistent with EU rules. Considering the current discussion in Germany and Europe regarding the compatibility of the infrastructure charge with EU law, however, reveals the challenges that go beyond a pure welfare economics approach. Knowledge about welfare effects is not sufficient for a country embedded in a multi-level system. Both the legal point of view and political sciences play a non-negligible role. The paper at hand focuses on the complexity of decision making in multi-level systems and suggests ways to handle it. That is, although decisions regarding infrastructure financing maybe efficient on the national level, they will not necessarily be implemented. This has far reaching consequences on the way infrastructure is financed or – rather – if the way of infrastructure financing shall be changed. The paper is structured as follows: At first the need for another way of infrastructure financing in Germany is described before the options existing as well as their pros and cons are presented. Subsequently, the current choice of the German government is viewed in light of this evaluation. The governance approach is then used in order to analyze the challenges of road charging in Germany. Eventually, a conclusion is drawn.

**W206 Explaining Gaps in Infrastructure Investment by Municipal Governments in Australia**

*Phil Simmons, University of New England; Brian Dollery, University of New England*

Shortfalls in infrastructure expenditure represent a ubiquitous problem in all Australian local government systems as well as in many other countries. In this paper we use an evolutionary model to describe how local government investment decisions are made. We demonstrate that fear of reputational damage among elected councilors could cause herding behavior resulting in convergent and overly cautious investment behavior by councils. Under these conditions divergent viewpoints amongst council members are discouraged and local government may become moribund in its decision-making. We show how this may result in ‘gaps’ in infrastructure investment.

5 August 2015

0500pm to 0600pm

Room 835

**Session 2.5 Welfare and Happiness Economics I**

**Session Chair** Pundarik Mukhopadhaya, Macquaire University

**WED**  
**0500 pm**

**W198 Can Happiness Provide New Insights into Social Inequality? Evidence from Japan**

*Yoko Niimi, Aisan Growth Research Institute*

This paper examines recent trends and determinants of happiness inequality in Japan using unique data from the “Preference Parameters Study of Osaka University” that was conducted annually in Japan during the 2003-2013 period. The data illustrate that, despite some fluctuations, Japan observed a fall in happiness inequality along with income growth during this period. By estimating Recentered Influence Function regressions, we find a negative and significant relationship between income level and happiness inequality, as found for other countries. The results also show that people’s perception of their relative standing in the income spectrum matters for the level as well as the dispersion of happiness. Other key determinants of happiness inequality include the insecurity of jobs, unemployment, the fear of becoming unemployed in the near future, having health concerns, feeling a sense of loneliness, and the expected coverage of living costs by public pensions after retirement, all of which have a positive effect on happiness inequality except that the public pension variable negatively affects the dispersion of happiness. Our empirical analysis illustrates that happiness inequality is a useful addition to the set of conventional inequality indicators to monitor and better understand social inequality and to formulate measures to tackle inequality-related issues.

**W269 Drops of Happiness: How Indonesian Value Access to Water in Their House**

*Anissa Rahmawati, Padjadjaran University*

This study uses happiness method in valuing access to domestic water source in Indonesia. Using cross sectional data from Indonesian Family Life Survey, it models individual happiness as function of wealth, types of water source in household and community level and demographic characteristics. People with higher wealth reported higher individual happiness. The presence pump water in household level have a significant effect to increase individual happiness in urban area, but for people living in rural area, the presence of pump water in household level will only have significant impact to their happiness if other people in the neighborhood also have access to similar water source. The calculation of willingness to pay for access to pump water in household is approximately 85% of mean per capita expenditure for one-time installation.

**W436 Religiosity and Happiness: Are Religious People Happier? A Cross Section Analysis of Subjective Happiness in Indonesia**

*Ridho Al Izzati, University of Padjadjaran*

Happiness as a proxy of individual subjective well-being. This paper using the Indonesian Family Life Survey (IFLS) wave 4th year 2007, a longitudinal survey by RAND. This paper investigates the relationship between an individual's level of religiosity and level of happiness using the IFLS data. Authors construct the econometrics model for estimation where religiosity as a proxy determined by individual's level of subjective religiosity from Muslim and frequency of pray a day toward level of subjective happiness. Running ordered probit model for estimation, this article find the positive and significant relationship between religiosity and subjective happiness an individual and that religiosity correlates and contribute to increase the happiness. I also find that religion has a larger effect on subjective well-being on men than women.



5 August 2015

0500pm to 0600pm

Room 836

**Session 2.6      Housing and Financial Crises**

**Session Chair**      Khay Boon Tan, Singapore Institute of Management University

**WED**  
**0500 pm**

**W288 Inflation Expectation and Financial Crisis: An Empirical Analysis  
based on the TVP-VAR Approach**

*Hiroyuki Ijiri, Kobe University; Toshiki Jinushi, Kobe University*

The paper investigates the evolution of the inflation expectations in the advanced economies under the recent financial crisis. The deflation has become a serious risk for many economies after the financial crisis and the inflation expectation is the key variable to avoid that risk. We use the break-even inflation rates as a measure of the inflation expectation. We examine first the differences in the movements of inflation expectations facing the domestic/international financial shocks in the various economies. We then try to understand whether the monetary policy frameworks, such as inflation targeting, influence onto those differences. We choose to use the Time-Varying-Parameter (TVP) VAR methods since the economic structure were not stable through the period around the financial crisis. We find that, compared with the inflation targeting economies, the non-inflation targeting economies tend to have the sustained influences of the financial shock on the inflation expectation. We try a couple of block recursive constraints reflecting the sources of financial shocks but the empirical results are robust.

**W391 Asymmetric Price Transmission and Pairs Trading**

*Kun Ou, Nanyang Technological University; Youngho Chang, Nanyang Technological University*

Pairs trading is a market neutral trading strategy and its profitability has been extensively studied. The basic idea of pairs trading is to pair up two or more tradable assets that could move in tandem and create a mean reverting spread. The long run relationship between the selected assets could be examined by cointegration and the deviation from the long-run relationship could signal profitable trading opportunities. This study aims to examine whether there is the well-observed phenomenon of asymmetric price transmission in agricultural commodity market and to see how to implement a pairs trading strategy with this nonlinearity. The trading result obtained from asymmetric price transmission is later compared with those obtained from the principle component regression and traditional linear cointegration. This study appears to suggest evidence of the superior profitability in the trading strategy implemented with asymmetric price transmission.

5 August 2015

0500pm to 0600pm

Room 837

**Session 2.7      Social Network and Polarization**

**Session Chair**      Edward Tower, Duke University

**WED**  
**0500 pm**

**W378 [Invited] Polarization and Strategic Exaggeration**

*Gordon Rausser, University of California at Berkeley; Leo Simon, University of California at Berkeley and Monash University; Jinhua Zhao, Michigan State University*

The US society is increasingly polarized on a growing number of issues, from abortion to gay rights, from tax policies to economic stimulus, from renewable energies to climate change, etc. Increasing public and especially elite polarization has been blamed for political gridlocks and government failures. A number of factors have been proposed as driving such polarization, such as rising income inequality, migration patterns, and political redistricting. In this paper, we identify yet another factor, which has not previously been modeled: polarization can result from strategic information aggregation, in which the left and the right engage in exaggeration and counter-exaggeration of their political positions in order to influence policy outcomes. We model the political process as one in which public debate by the “elite” with known political positions or biases are transformed into policies. The elites are positioned along a political spectrum from the left to the right, and have private information about certain “issues” such as the costs or damages of climate change. They send messages about their private information to the “center” or decision maker by declaring their platforms. The center then makes a decision about the issue based on the aggregate of these messages. We argue that this information aggregation game captures certain aspects of real world political processes that exhibit polarization. We distinguish between position polarization, which measures the heterogeneity of elite political orientations, and platform polarization, which measures the dispersion of elite public messages. While the former offers an objective measure of the political landscape, the latter directly contributes to policy-making and is a consequence of the information aggregation process. We show that elites have incentive to exaggerate and counter-exaggerate their private information, causing platform polarization to exacerbate position polarization. Further, as position polarization rises, platform polarization will increase even more. On the other hand, institutional changes designed to limit the degree of platform polarization might be counter-productive from the perspective of information aggregation.

**W464 The Wisdom of Social Links: Learning, Interaction and Self-organized Efficiency**

*Weihong Huang, Nanyang Technological University; Lyon Loh, Nanyang Technological University*

This paper utilizes an agent-based model to explore the non-pecuniary aspect of the impact of social learning on the utilitarian efficiency of the population in making decisions between discrete choices. The model embeds a small world network into a cellular automata framework. Consumers augment their limited private information by learning and deriving information from social interaction and imitation in their social network. The social interaction between individual consumers in a small world network is an efficient aggregation mechanism of information, which overcomes the frictions of imperfect information and bounded rationality of individuals. Social learning in liberal economies generates aggregate rationality from individual bounded rationality, resulting in a self-organized efficiency of consumers in optimal decision-making.

**W513 Being Seen to Care: The Importance of Lender Visibility in Pro-social Crowdfunding Campaigns**

*Joe Cox, University of Portsmouth; Thang Nguyen, University of Portsmouth; Andy Thorpe, University of Portsmouth; Alessio Ishizaka, University of Portsmouth; Salem Chakhar, University of Portsmouth; Liz Meech, University of Portsmouth*

It is widely argued in philanthropy literature that donors are motivated by concerns about enhancing their social image and reputation. Findings that people behave more pro-socially in publicly visible activities than invisible ones are largely considered as evidence of image concerns motivations. Given online fundraising is becoming an increasingly important activity for many charitable organizations, this paper aims at investigating whether and how donors are motivated by image concerns in the Internet environment. We examine behavior of donors in the pro-social lending crowdfunding platform ‘Lendwithcare’ and show that lenders with image concerns choose to support a greater number of projects (visible activity), while do not contribute more money to each project (invisible activity) compared to lenders without image concerns. We also take steps to control for the endogenous nature of the relationship between image concerns and pro-social behavior through the use of an instrumental variable reflecting breadth of engagement with social media platforms. Our study significantly contributes to literature by providing novel evidence of image concerns motivation in Internet environment.

5 August 2015

0500pm to 0600pm

Ballroom III

**Session 2.8      Heterogeneous Agent Model**

**Session Chair**      Yang Zhang, University of Macau

**WED**  
**0500 pm**

**W481 Short-term Momentum and Long-term Reversal in General Equilibrium: Limited Commitment and Belief Heterogeneity**

*Pablo F. Beker, University of Warwick; Emilio Espino, Universidad Torcuato Di Tella*

We evaluate the ability of the Lucas (ECTA, 1978) tree and the Alvarez-Jermann (ECTA, 2000) models, both with homogeneous as well as heterogeneous beliefs, to generate a time series of excess returns that displays both short-term momentum and long-term reversal, i.e., positive autocorrelation in the short-run and negative autocorrelation in the long-run. Our analysis is based on a methodological contribution that consists in (i) a recursive characterization of the set of constrained Pareto optimal allocations in economies with limited enforceability and belief heterogeneity and (ii) an alternative decentralization of these allocations as competitive equilibria with endogenous borrowing constraints. We calibrate the model to U.S. data as in Alvarez and Jermann (RFS, 2001). We find that only the Alvarez-Jermann model with heterogeneous beliefs delivers autocorrelations that not only have the correct sign but are also of magnitude similar to the US data when the preferences parameters are disciplined to match both the average annual risk-free rate and equity premium.

**W483 Exponential Bubble and Linear Trend under Heterogeneous Expectations**

*Zichun Huang, Nanyang Technological University; Weihong Huang, Nanyang Technological University; Wai-Mun Chia, Nanyang Technological University*

Using Freddie Mac housing price index from 1997 to 2006, we classify housing bubbles in the United States into an exponential pattern and a linear pattern. An exponential bubble is a housing price bubble that grows exponentially before it bursts. A moderate linear trend is a housing price movement that increases slowly in a linear trend before it collapses. While the housing price movement in Arizona, Florida and Nevada exhibit an exponentially increasing trend, Georgia and Michigan present a linear appreciation of housing prices during this period. We develop a three-heterogeneous agent model (HAM) consisting of fundamentalists, trend followers and noise traders to show that, without any exogenous shocks, the housing price movements could have been affected by the interaction between these 3 types of agents. Our nonlinear regression results confirm the co-existence of the three types of agents in the housing markets and show that (1) exponential bubbles could be primarily driven by the dominance of the trend followers and (2) a linear growth in housing prices could be explained by systematically constant proportions of each type of agents. Simulation experiments also suggest that the formation of an exponential bubble could be due to a more frequent transition between trading strategies, a stronger belief in the housing trend and a smaller gross return on risk free asset relative to housing.

**W535 Endogenous Fluctuations and Chaos in a Model of Exchange Rate with Heterogeneous Expectations**

*Soumya Datta, South Asian University*

We propose a purely deterministic continuous-time model of exchange rate dynamics with heterogeneous agents. The rate of exchange depends on a combination of fundamental factors and speculative behavior by heterogeneous agents in foreign exchange markets. Following Frankel & Froot (1986) and Chiarella, He & Zheng (2013), the exchange rate markets consist of three kinds of speculators: fundamentalists with a belief in fundamentals, chartists relying on technical analysis and portfolio managers combining the expectation of the fundamentalists and chartists. We, however, make two main departures from Chiarella, He & Zheng (2013). Firstly, we consider a situation where the exchange rate dynamics are determined primarily by the actions of speculators. In other words, the fundamentals do not change in short-run, making the impact of the actions by speculators the primary focus of our study. Secondly, we include in our model a process of adaptive learning by the portfolio managers, where the weights assigned by the portfolio managers to the beliefs of the fundamentalists and chartists respectively are determined by a fitness test of relative success of these two strategies in recent past. We demonstrate diverse dynamical possibilities from this simple interaction between heterogeneous speculators with adaptive learning. This includes convergence to a steady state representing the fundamental solution, endogenous cycles around it and complex chaotic dynamics from various types of bifurcations in codim 1 and codim 2. Finally, we examine the extent to which certain anomalies and puzzles in the empirical literature on exchange rates can be explained within the framework of our model.

**WED**  
**0500 pm**

6 August 2015

1045am to 1205pm

Room 831

**Session 3.1      Macroeconomics and Monetary Policy I**

**Session Chair**      Hui Ying Sng, Nanyang Technological University

**T062      Exchange Rate Arrangement, Monetary Policy and Inflation Volatility:  
An Empirical Study for Malaysia, 1958-2012**

*Akhand Akhtar Hossain, Newcastle Business School*

This paper highlights the issue of persistent inflation volatility in Malaysia from the late 1950s and draws implications on monetary policy for stabilizing inflation and economic growth. Inflation volatility in Malaysia was significantly higher than that for the United States, especially over the period 1958-2004, under a fixed-pegged exchange rate system. This led to unpredictable movements of real interest-and exchange rates in a ‘mildly’ repressed financial system. After examining the dynamic interrelations among inflation, the real interest rate, the real exchange rate and real output within a structural vector autoregressive (SVAR) modeling framework, the paper investigates some key monetary relations, namely the stability of the money-demand function and any linkage between money, output and prices, which provide a foundation of rule-based monetary policy for price stability under a flexible exchange rate system. The empirical results suggest that the narrow money-demand function in Malaysia remained stable over the period 1971-2012 and that there existed a cointegral-causal linkage between money, output and prices during this period in both static and dynamic sense. These findings give credence to deployment of a monetary aggregate as an instrument of monetary policy for price stability, especially when the flexibility and effectiveness of a zero-bound interest rate becomes doubtful as an instrument of monetary policy in a low-inflationary environment. The estimates of an interest-rate response function suggest that, contrary to the expectations, Malaysia did not follow a rule-based monetary policy within the strategy of monetary targeting or inflation targeting to keep inflation low and stable; instead, it deployed monetary policy measures in a discretionary manner to achieve multiple objectives. An outcome of such a policy regime was elevated inflation volatility which affected real interest-and exchange rates and raised the volatility of economic growth. The paper draws conclusion that while a rule-based monetary policy, such as monetary targeting or inflation targeting, remains appropriate for Malaysia within a floating exchange rate system, the role of monetary policy should be narrowly defined as price stability, meaning low and stable inflation, not both price stability and output growth which is untenable both theoretically and empirically, and strictly implemented to enhance policy credibility and effectiveness.



**T080 Monetary Policy Rules under Endogenous Asset Market Segmentation**

*Vipul Mathur, Indian Institute of Management Bangalore; Chetan Subramanian, Indian Institute of Management Bangalore*

This paper examines the appropriate choice of monetary policy regime under flexible prices and endogenously segmented financial markets. Unlike the exogenous segmentation, monetary policy here crucially alters the segmentation itself, thereby affecting the choice of monetary policy regime. Four classic rules: interest rate targeting, monetary targeting, inflation targeting and Taylor rule are studied and welfare ranked by comparing them with optimal monetary policy. In the face of supply side shocks, interest rate targeting, by being counter-cyclical, comes closest to mimicking the optimal policy. On the other hand, Taylor rule and inflation targeting tend to be pro-cyclical and are outperformed by monetary targeting which is acyclical. Importantly, these results are in contrast to the sticky price literature where some variant of inflation targeting is always optimal.

**T143 Nontraditional Monetary Policy in a Model of Default Risks and Collateral in the Absence of Commitment**

*Hiroshi Fujiki, Chuo University*

A central bank often serves as a national central securities depository (CSD); however, academic papers do not take this role seriously. In this paper, we show that a central bank, by taking advantage of the role of a national CSD, could improve the allocation of resources by achieving faster exchange between collateral goods and fiat money to highlight its role as a national CSD. To demonstrate this point, we base our discussion on Mills and Reed (2012), who study both the incentive role and the insurance role of collateral in an optimal contract model that looks like a repurchase agreement contract. They show that the consumption of the lender will be the same whether the borrower is a productive agent or an unproductive agent. We extend their model by considering shocks to the second period of lenders' lives. Suppose that some lenders are hit by a taste shock that forces them to consume within an early stage of the second period of their lives, and the amount of goods available within that stage is not enough to meet the demand for goods from those lenders. The shock makes the consumption of lenders vary depending on the timing of transactions in the goods market, even though the lenders are insured against their borrowers' default and have the same money balances as the other lenders at the end of the first period of their lives. A central bank's nontraditional monetary policy, which increases the velocity of circulation of available collateral goods to allow exchange between those collateral goods and fiat money within an early stage of the second period of lenders' lives, will achieve a better resource allocation.

**T145 Monetarism Rides Again? US Monetary Policy in a World of Quantitative Easing**

*Vo Phuong Mai Le, Cardiff University; David Meenagh, Cardiff University; Patrick Minford, Cardiff University and CEPR*

This paper gives money a role in providing cheap collateral in a model of banking; besides the Taylor Rule, monetary policy can affect the risk-premium on bank lending to firms by varying the supply of M0, so at the zero bound monetary policy is effective; fiscal policy crowds out investment via the risk-premium. A rule for making M0 respond to credit conditions can enhance the economy's stability. Both price-level and nominal GDP targeting rules for interest rates combined with this stabilize the economy further. With these rules for monetary control, aggressive and distortionary regulation of banks' balance sheets becomes redundant.

6 August 2015

1045am to 1205pm

Room 832

**Session 3.2 Economic Development and Technological Change**

**Session Chair** Stephen Turnovsky, University of Washington

**T200 Agricultural Legacy, Individualistic Culture, and Technology Adoption**

*James B. Ang, Nanyang Technological University*

**THURS**  
**1045 am**

This paper presents evidence on the relationship between culture and technology adoption. It hypothesizes that societies with more individualistic cultures tend to be more embracing of new technologies. Using data for 82 countries, the estimates show that technology adoption index strongly correlates with the national scores on individualistic cultures. To isolate the endogenous influence of culture, rice suitability ratio is used as an instrument. This approach is based on the argument that farming rice makes cultures more interdependent, and hence less individualistic. Such an agricultural legacy explains differences in technological development in the modern world. The instrumental variables results consistently show that the variation in the exogenous component of individualistic cultures is positively associated with the levels of technology adoption, thus suggesting that countries with higher scores on individualism are more inclined to adopt new technologies. These results lend strong support to our hypothesis and suggest a framework for understanding the roots for the variation in the levels of technology adoption across countries

**T086 The Abridge of Prosperity of British Empire Through the History of Lord Elgin Family in 19th Century**

*Masami Kita, Soka University*

The family record of Lord Elgin was the one of the most attractive and magnificent one among the many peers in Victorian high time of the British Empire. Scotland had the Union of Crown in 1603 with England and in 1707; Scotland was economically absorbed by England called the Union of Economy. In addition, under the Queen Victoria, culturally Scotland became closely related with England which was called the Union of Culture. After the Union, Scottish economy started her industrialization under stimulation of the progress of English development. There were Linen and Woolen industries but still only the supportive role to those of England. Though the defeat of Jacobite rebellions of 1715 and 1745 against English government, a number of Scottish war criminals of landowner and warrior was deported to America, Canada, Australia and New Zealand. Scottish society while keeping the tradition of her religion, culture and business performance, made the important half of British prosperity with England in the process of the Industrial Revolution. West part of Scotland to be the heart of British Industries was named, when Britain to be the factory of the World was called. In those flourishing days Edinburgh was applauded the capital of literature and Glasgow was that of railway and naval architecture. In world history, the duration between 1815 and 1914 was called the era of Pax Britannica and in this historical background, I would like to focus on the Lord Elgin family from 7th to 9th as the symbolic behavior of Scottish well educated landlord in terms of the particular era of British prosperity of the world.

**T493 Good Geography, Good Institutions? Historical Evidence from Nineteenth-century British Colonies**

*Eik Leong Swee , University of Melbourne ; Laura Panza, University of Melbourne*

This paper uses a historical natural experiment - the opening of the Suez Canal - to investigate the relationship between geography and the formation of institutions. Contrary to conventional wisdom, we posit that colonisers may in fact build non-extractive institutions in well-endowed colonies, if their ability to extract rents depends on the productivity of the non-elite native population. We test this hypothesis by examining one aspect of geography - location - using historical data on nineteenth-century British possessions. Our results indicate that while these colonies were geographically positioned to benefit from the post-Suez trade-led economic expansion, entrepot colonies (Hong Kong and the Straits Settlements) received larger public investments, in education, for example, than resource colonies (British India and Ceylon), which points to a peculiar case of non-exploitative rent-extraction. We demonstrate, using supplementary data, that our findings are driven by the variation in commodity endowments and no other possible confounders.

**THURS**  
**1045 am**

**T273 Influence of External Collaborations and Government R&D Support Policies on Firm Innovativeness: Econometric Evidence from India**

*Srinivas Kolluru, Macquarie University; Pundarik Mukhopadhaya, Macquarie University; Chris Heaton, Macquarie University*

Innovation output by a firm is essential for gaining competitive advantage over its competitors in any sector or industry, particularly in the present era of “open innovation”. Based on the data of 316 Indian enterprises during the period 2010-2012, the present study explores the effect of government innovation support policies and external collaborative efforts on the innovation outcome in the form of patent applications of firms based on the National Innovation System (NIS) and Resource-based-View (RBV) approaches using the technique of Tobit model. The findings show that there is significant positive relationship between inter-firm collaborations, cooperation with universities and research organizations and innovation performance of enterprises, of which the international partnerships are stronger than the domestic collaborations in the Indian context. Firm’s internal capabilities in the form of training and up-gradation of the skill of human resources have a positive influence on external innovative collaborations and innovation outputs. The results also indicate the significance of government innovation support in fostering the firm’s collaboration with international research universities and organizations as well as international firms in demonstrating significant impact on the patenting activities of the enterprises.

6 August 2015

1045am to 1205pm

Room 833

**Session 3.3 Migration**

**Session Chair** Yang Tang, Nanyang Technological University

**T160 Spatial Misallocation across Chinese Cities**

*Carlos Garriga, Federal Reserve Bank of St. Louis; Yang Tang, Nanyang Technological University; Ping Wang, Washington University in St. Louis and NBER*

This paper examines the consequences of rapid structural transformation and continual rural-urban migration for spatial misallocation in China. We construct a multi-tier spatial model within the dynamic general-equilibrium framework where urban production can be conducted by either private firms or state-owned enterprises (SOEs) and where urban amenities and infrastructures are allowed to differ. Households have heterogeneous preferences for urban amenities and infrastructures. We define a multi-tier dynamic spatial equilibrium and characterize the cutoffs for rural workers to stay, or to migrate to a low-tier provincial city or a high-tier major city, as well as the cutoff for low-tier provincial city workers to stay or to migrate to a high-tier major city. We establish conditions under which reversed migration would not occur. We then calibrate our model to fit key observations in China over the period from 1992 to 2008. Our quantitative results suggest that throughout the process of structural transformation, rapid sectoral shifts can exhibit severe spatial misallocation as a result of the migration barrier and the SOE distortion.

**T281 Urbanization, Local Rent Seeking and City Size Distribution in China**

*Xiaolu Li, Nanyang Technological University; Yang Tang, Nanyang Technological University*

How does urbanization process shape the city size distribution? What is the impact of local government's rent seeking behavior on citizens' welfare levels and the resulting population distribution across cities? These are important questions to study especially in the case of China. In this paper, we develop a dynamic general equilibrium framework to address those issues. Cities in our model vary in their exogenous productivity growth rate. Local government decides the residential land supply to maximize its objective, which is a combination of local GDP level with the so-called "pocket money" that local governor can possess. Workers tend to move to cities with higher conductivities, but may also face a higher housing price. Housing price in the paper captures the negative "congestion" effect from "over-populous" city. In equilibrium, both population and housing price distribution are endogenous. We calibrate the model to mimic the city size distribution in China 2000. Our model then successfully matches with the population distribution in China 2010, if we allow both productivity and urbanization process follow their time trend. Counterfactual exercises with respect to local government's rent seeking motive, urbanization rate and productivity growth rate also quantitatively reveal the relative importance of each potential factor in shaping city size distribution in China. Our results suggest that productivity is still the main driver; the impact of urbanization is moderate, while local government's rent seeking behavior seems to have little influence on city size distribution in China.

**THURS**  
**1045 am**

**T261 Measuring Cross-country Immigration Policies**

*Glenn Rayp, Ghent University; Ilse Ruyssen, Ghent University; Samuel Standaert, Ghent University*

In the face of the intensified international migration pressures of the recent decades, many developed countries were spurred to revise their immigration regulations and increase border controls. However, the development of these reforms as well as their effectiveness in actually managing new immigration flows remains poorly understood. Part of the reason is that immigration policies are hard to quantify in practice such that a universal measure does not exist. To fill this gap in the literature this paper constructs a composite indicator of the overall restrictiveness of policy barriers across countries, allowing us to gauge the factors determining the toughness of immigration regulations. Empirical studies of immigration policy have focused either on the economic effects of migration or on the political effects using a median voter or interest group approach. In this paper, we look at the economic factors in explaining immigration policies in developed countries, but more in particular to the cross-country correlation in migration policy. Because of the lack of a universal policy measure, such a cross-country analysis has not been performed so far. We find evidence for a substantial national margin in migration policy, which is perhaps surprising in the case of the very symmetrical host countries of immigration under consideration here.



**T173 Migration, Agricultural Production, and Liquidity Constraints:  
Impacts of Randomized Credit Access**

*Shu Cai, Hong Kong University of Science and Technology*

Why have microcredit programs been successful in some areas but not in other areas? This study provides an explanation based on the interaction between credit market and labor market frictions. I reconcile the heterogeneity in impacts of microcredit programs across areas by a unified model of profit maximization of agriculture production and migration. When labor market is perfect, the microcredit program will increase the opportunity cost for working outside own farm. Reduction in remittance may partly offset increase in agricultural revenue. While migration bears upfront cost and is constrained by liquidity, access to credit may increase rather than decrease migration. Therefore revenue from both agriculture and remittances will increase. I empirically test these predictions by using data from a random control trial which provides credit access to randomly selected villages in poor areas of rural China. I find exogenous increase in credit access raise the migrations substantially for the poor households, which confirms the role of liquidity constraints on migration. Meanwhile, the program is found to be more successful in increasing income in areas with low migration prevalence, suggesting the impacts of microcredit program are influenced by labor market frictions. This study implies the interaction of failures in credit and labor markets may reinforce the poverty traps.

**THURS**  
**1045 am**

6 August 2015

1045am to 1205pm

Room 834

**Session 3.4 Information, Knowledge and Uncertainty**

**Session Chair** Boon Seng Tan, Institute of Singapore Chartered Accountants

**T079 Complexity of Payment Network**

*Hitoshi Hayakawa, Hokkaido University*

A graph-theoretic framework is developed to study decentralized settlement in a general payment network. This paper argues settlement efficiency through examining how much settlement fund needs to be provided to settle all given obligations. Observing that required amount of settlement fund depends on in which order those obligations are settled, we focus on a pair of problems that derives its lower-bound and upper-bound, each formalized as a numbering problem on flow network. Our main finding is that twist nature of underlying directed graph (who obliged to whom) is a key factor to form settlement efficiency. The twist nature is captured through our original concepts; arrow-twisted, and vertex-twisted. Lower-bound of required settlement fund tends to be larger when underlying directed graph is twisted in arrow-twisted sense, while upper-bound tends to be smaller when it is twisted in vertex-twisted sense.

**T188 Render unto Hotelling and Knight What Belongs to Them:  
Equilibrium Exhaustible Resource Price Dynamics with Ambiguity**  
*Chen Lin, Shandong University; Shuzhen Yang, Shandong University*

Most of the resource extraction and pricing models assume that risks are known with certainty. However, empirical studies have shown that we need an implausibly high degree of risk diversification to rationalize a Hotelling/Capital-Asset-Pricing model of exhaustible resources. Many choice situations feature Knight uncertainty (i.e., ambiguity or uncertainty about risk) in addition to pure risk. We present an exhaustible resource pricing model with recursive multi-priors utility in continuous time to demonstrate the effect of ambiguity aversion on resource extraction and pricing. To investigate the pricing problem under various market structures, we discuss a competitive market with homogeneous producers as well as one with heterogeneous producers. Our results show that besides the famous Hotelling rule, ambiguity aversion also contributes to exhaustible resource pricing. This explains the relatively high excess returns empirically observed in the Hotelling/Capital-Asset-Pricing model of exhaustible resources. In other words, render unto Hotelling what belongs to Hotelling, and render unto Knight what belongs to him.

**THURS**  
**1045 am**

**T317 Human Capital Investment, Signaling, and Wage Differentials**  
*Masashi Tanaka, Osaka University*

This study considers how individuals determine the ratio of two kinds of educational investment. One kind contributes to labor skills and the other does not, corresponding to human capital investment and signaling, respectively. We formulate an overlapping generations economy in which the rich and poor invest in both types of education. We argue that the ratio of human capital investment to signaling investment is a U-shaped function of the wage differentials between the rich and poor. Moreover, we identify three patterns of stable steady states for these wage differentials, namely, no-inequality, high-inequality, and multiple steady states. Using these results, we conclude that exogenous factors, such as a rapid increase in skill-biased technology, may switch the steady state from no inequality to high inequality. This causes an increase in the ratio of signaling investment for at least some periods during the transition to the new steady state.

**T377 The Different Effects of Risk Preferences on the Adoption of Agricultural Technology: Evidence from a Rural Area in Cambodia**  
*Daichi Shimamoto, Waseda University*

This paper investigates how farmers' risk attitudes affected the adoption of agricultural technology in a rural area in Cambodia. We incorporated prospect theory to farmers' utility function and examined the effect of the risk attitude of farmers to the adoption of two technologies: adoption of a moisture meter for measuring the moisture content of seeds, a recently introduced post-harvest technology, and a modern rice variety that was introduced in the 1990s. The results indicated that risk averse farmers adopted a moisture meter to measure the moisture contents of seeds significantly. With respect to the modern rice variety, farmers' risk attitude did not affect the adoption. Our results and the results of a previous study imply that the type of risk faced by farmers at the time of decision-making of its adoption partly determine the effect of risk attitude on agricultural adoption.

6 August 2015

1045am to 1205pm

Room 835

**Session 3.5 Smart Economic Planning and Industrial Policy (SEPIP)**

**Session Chair** Ahmet Faruk Aysan, The Central Bank of the Republic of Turkey

**T548 [Invited] Automotive Industry in Turkey and South Korea in Retrospect**

*Murat A. Yülek, Istanbul Commerce University; Kwon Hyung Lee, Korea Institute of International Economy Policy*

**THURS  
1045 am**

Turkey and South Korea are among the larger automobile manufacturing countries in the world. However, South Korea's manufacturing volume is much larger than Turkey. Further, South Korea has developed indigenous automobile manufacturing brands and technology and its automobile exports to global markets are much larger than Turkey's. In this paper, we are attempting to analyze the factors behind this divergence. We look at the historical development of the automobile manufacturing sector in the two countries. Secondly, we try to identify differentiating factors including policies.

**T518 Singapore in The Global Value Chain: Perspectives of Trade in Value-added**

*Mun Heng Toh, National University of Singapore*

The OECD-WTO Trade in Value Added (TiVA) database was made public more recently and has been mostly used in studies relating to trade policies and the global value-chain (GVC). This paper will abstract information and indicators of GVC participation from that database with specific reference to Singapore. Following that we investigate whether new concepts and implications of trade in value-added and global value chains can provide new perspectives and prospects of continued sustainable growth of the Singapore economy.

**T543 Empowering and Institutionalizing Social Entrepreneurship for Innovation and Inclusive Growth: Public Policy Experiences**

*Muradiye Ates, Yildirim Beyazit University*

Social entrepreneurship is described as “any private activity conducted in the public interest, organized with an entrepreneurial strategy, but whose main purpose is not the maximization of profit but the attainment of certain economic and social goals, and which has the capacity for bringing innovative solutions to the problems of social exclusion and unemployment”. In contrast to the classical entrepreneurship the primary goal of social entrepreneurship is to create social value and sustainable inclusive growth. Concept of social entrepreneurship has been recently begun to take consideration. On the other hand, more and more countries pursue to address supportive mechanisms in their governmental economic planning with an aid to improve social economy that enables strong, sustainable, prosperous and inclusive society.

Promotion of social entrepreneurs by various means of the governments are of necessary when it comes to developing efficient and effective solutions to social, economic and environmental problems, hailing market failures, fostering inclusive growth and increasing social inclusion since they aim to pursue the general interest and to benefit communities. In this context, main aim of the paper is to highlight governments’ role and capacity in empowering social entrepreneurs and investigate institutionalizing process of the public policy towards social innovations by shedding light on theoretical background and up-to-date application experiences from various countries. Grameen Bank of Muhammed Yunus, Food Cycle UK (Reducing food waste and food poverty at the same time), Solar Sister (Creating job opportunities for women in Sub-Saharan Africa while promoting clean cooking technology) are some of the illustrative examples of social innovation which creates social impact along with the job and economic growth. Governmental policies which aim to empowering the social entrepreneurs will increase employment rate of displaced people that ensures inclusive economic growth and reveal high social impacts while providing direct impact on economic development, on the one hand, and reducing the burden of government for social policy on the other hand. Growing number of countries puts emphasize on other dimensions of development by including additional aspects as human development and social progress in their governmental planning. The way governments provide support to social entrepreneurs and necessary institutions are gradually generated. Currently, a number of countries, including EU countries and USA have introduced public plans which are illustrative of governmental aid towards empowering social entrepreneurs. Encouraging social entrepreneurship both financial and structural means are enabled by governments through introducing capacity building measures, structuring legal and regulatory frameworks, development of different funding mechanisms and

creation of cross-sectoral partnerships and collaborations.

**T547 Whither Developmental State in East Asia**

*K. Ali Akkemik; Kadir Has University; Murad Tiryakioğlu; Afyon Kocatepe University*

The role of political institutions in the economic activities is one of the main topics of debate. Also, developmental state is in the focal point of debates on the political economy of economic development. Developmental state that has a role in most areas from economic planning to encourage of technological development, has always a role in retrospect. The role of the state in economic development is described more specifically by East Asian late-development experiences. Although developmental state might seem as superannuated concept, East-Asian governments has used again as redefined especially in the East-Asian Crisis and also transformation to knowledge-economy period. The rise of China provided optimism in the changing developmental state concept. East-Asian experiences, especially Japan and South Korea's industrial policies, show that developmental state is key factor in the catching-up. 'New' developmental state is directing firms to increase the technological capabilities and compete in the global markets as a coordinator instead of giving financial incentives. In other words, developmental state evolves. As a result, study that is framed by these experiences and discussions, aims to evaluate developmental state's role for first and second-generation late-developers, and query the future of developmental state.

**THURS  
1045 am**

6 August 2015

1045am to 1205pm

Room 836

**Session 3.6      Public Economics I**

**Session Chair**      Parkash Chander, Jindal School of Government and Public Policy

**T172    Tax Competition within the Multi-level-system of the EU and Developments in the Distribution of Tax Burden**

*André Heinemann, University of Bremen; Andreas Knorr, German University of Administrative Sciences*

Tax competition is, for most governments, an undesirable side-effect of the liberalisation of cross-border economic activities, but rather a fact of life. Economists analyse tax competition between jurisdictions as a generally accepted mechanism to enforce an efficient provision of public goods and accordingly to achieve an efficient allocation and a welfare optimum. Moreover, tax competition may discipline the political-administrative decision makers and protects citizens and firms against too high tax burden within a multilevel system.

Our paper deals with the incidence of the tax burden under the conditions of tax competition. We start with a brief theoretical framework assuming two taxable factors. Using EU data we examine the development of tax revenue to GDP ratios in the EU member states for a ten years period after 2002. We find that in most EU Member states increasing tax revenue to GDP ratios can be observed in a scenario of decreasing nominal tax rates of taxes on capital (corporate income taxes). The paper then focuses on the tax burden of the taxable factors. The results show that in the EU the factor “labor” becomes more and more nominally burdened compared to capital. Our contribution to the literature is to derive the need to bring together both the partial analyses of labor markets and the partial analysis of labor and capital allocation which are covered by separate strands in the existing literature. Finally, we discuss the effective tax burden of taxable factors to conclude whether in particular a mobile factor can be burdened.



**T346 Welfare Analysis of Income Tax Reform for Thailand: Micro-Simulation Approach using Household Micro Datasets**

*Takayuki Kaneda, Kwansai Gakuin University; Kyosuke Kurita, Kwansai Gakuin University*

For most ASEAN countries, tax reform, especially personal income tax reform, is very important and urgent issue to build modern tax structure and achieve sound fiscal condition. It is, however, far from ideal. Thus, the purpose of this paper is to analyze the welfare change under the simulation scenarios of income tax reform in Thailand using micro-simulation approach. Our simulation analyses suggest an intriguing possibility that the tax revenue could be more than double without loss of utility and large fluctuation of the income after-tax. The tax reform is now in progress in Thailand. To avoid the middle income trap and catch up to developed countries, government can afford to take drastic reform.

**THURS**  
**1045 am**

**T394 Progressive Taxation, Endogenous Growth, and Macroeconomic (In)Stability**

*Shu-Hua Chen, National Taipei University; Jang-Ting Guo, University of California, Riverside*

In the context of a standard one-sector AK model of endogenous growth, we show that the economy exhibits equilibrium indeterminacy and belief-driven aggregate fluctuations under progressive taxation of income. When the tax schedule is regressive or flat, the economy's balanced growth path displays saddle-path stability and equilibrium uniqueness. These results imply that in sharp contrast to a conventional automatic stabilizer, progressive income taxation may destabilize an endogenously growing macroeconomy by generating cyclical fluctuations driven by agents' self-fulfilling expectations or sunspots.

**T176 Crowding out Effect of Public Employment on Private Employment in India: A Cointegration Analysis**

*Damodar Nepram, Manipur University; Md. Samsur Jaman, Jiri College*

Unemployment is a problem confronting modern governments and public sector is often used as a means of providing jobs. But it has been observed in a number of studies that public employment crowds out of private employment both in developed and developing countries. It adds to the curiosity of the existence of such a phenomenon in a big developing country like India where unemployment is quite high and supply of labor is large. An examination of the growth of organized sector employment in the country during the period 1971-2012, however, fails to find a clear relationship between the two variables. In the initial phase of the study, there has been a slow growth in the size of both public and private employment which gives an impression that public employment crowds in private employment. But they moved in opposite directions in the later period. There has been a reduction in public employment due to government's downsizing programme which is being followed by a rise in private employment. In order to examine the relationship statistically, the paper uses cointegration technique and finds that the growth of gross domestic product has positive effect on private sector employment while public sector employment has very little influence on private sector employment. The finding is confirmed by the use of error correction model also.

6 August 2015

1045am to 1205pm

Room 837

**Session 3.7      Macroeconomic Aspects of International Trade and Finance**

**Session Chair**      Ramkishen Rajan, George Mason University

**T524      Does Foreign Bank Presence Affect Financial Inclusion in Emerging and Developing Economies?**

*Sasidaran Gopalan, Hong Kong University of Science and Technology;  
Ramkishen Rajan, George Mason University and National University of  
Singapore*

**THURS  
1045 am**

An important dimension of the effects of foreign bank entry on financial sector development relates to that of financial inclusion. Despite its policy significance, the empirical literature offers little evidence on the impact of bank competition generally or foreign bank entry specifically on financial inclusion. This paper examines the relationship between foreign bank entry and financial inclusion for a panel of 57 emerging and developing economies over the period 2004-2009. The empirical findings suggest that foreign banks have a positive impact in furthering financial inclusion, though the relationship turns negative when foreign bank entry is followed by greater banking concentration.

**T545 Open-economy Stabilization Policy in a Contemporary Context**

*Sven W Arndt, Claremont McKenna College*

This paper employs an open-economy macroeconomic model that reflects more fully the key aspects of the contemporary U.S. economy, which may have played important roles in the recent episodes of instability. Two of the key aspects being modeled are: (1) the country's dual or hybrid exchange-rate regime with its exchange rate free to adjust with some countries but are fixed with the others, and (2) the presence of significant protection on some industries from foreign competition. We first review monetary policy in a medium-term open-economy model with perfect flexibility in prices and wages. The exchange-rate regime is a combination of fixed and floating rates and the real economy is divided into two types of industries with one producing goods tradable goods that face significant foreign competition and the other producing nontradable goods that is largely protected from the rest of the world. We then study the effects of monetary expansion on the relative price between the two industries and on the distribution of productive resources between them. The effects of a positive wealth shock on the sectorial distribution of productive resources under (1) fixed exchange rates with low capital mobility such as that of US-China and (2) floating rates with high capital mobility such as US-Eurozone, are also examined.

**THURS**  
**1045 am**

**T541 Measuring Economic Interconnections in Asia: The Real Financial Nexus**

*Tony Cavoli, University of South Australia*

This paper presents an examination of the economic and financial linkages for a selection of economies in the Asia-Pacific region for the period 2001 to 2012. The countries examined are the ASEAN5 group of nations – Indonesia, Malaysia, the Philippines, Singapore and Thailand; the three large northeast Asian economies of China, Japan and South Korea; and Australia and New Zealand. Taking a multivariate approach to measuring integration, we examine 6 broad measures of economic interconnections for the following reasons: Firstly, to unlock as much information as possible about the nature of economic and financial integration between the countries examined. Secondly, to investigate whether (and which) individual dimensions of these connections might drive economic integration more generally, in the Asia Pacific region. We find that, regardless of the measure used, Australia and New Zealand are the most connected country pair. We also find that interconnections within and between the ASEAN5 countries are driven primarily by financial linkages, while those for the larger countries in the region are driven more by real linkages. Finally, we find that real linkages are dynamically positively related to financial linkages, that is, they exist as complements.

**THURS**  
**1045 am**

#### **T447 Are Asset Prices in Singapore Driven by Capital Flows?**

*Hwee Kwan Chow, Singapore Management University; Taojun Xie, Singapore Management University*

It is well recognized that foreign capital flows into small domestic asset markets is an important source of asset price instability. Moreover, asset price swings can have a destabilizing effect particularly on small open economies. Singapore is an archetypical small open economy which recently witnessed a substantial volume of capital inflows related to the low external interest rate environment as well as the surge in global liquidity. After the onset of the global financial crisis, global liquidity has increased rapidly arising from the use of unconventional monetary policies such as quantitative easing or large scale asset purchases in the advanced economies. Various studies including Fratzcher (2012) and Calvo et al. (1993) have shown the state of liquidity in the developed countries is an important push factor that drives capital flows to emerging markets. Indeed, there was an influx of capital into Asia post crisis such that capital inflows already exceeded its pre-crisis level in early 2010.

At the outbreak of the global crisis, both stock prices and house prices in Singapore took a dive. However, both asset prices rebounded quickly afterwards, with the residential property price index hitting a historic high in 2013. This raises the question of whether the observed surge in asset prices is driven by the upsurge in capital inflows to Singapore. If they are, how does the impact of foreign capital on the stock market differ from that on the housing market? Due to the limited availability of data, recent literature on this topic tends to study the impact of capital flows on asset prices for the region as a whole. For instance, Tillman (2012) and Kim and Yang (2009) used a panel VAR approach to examine house prices and stock prices in Asia respectively. In this study, we examine the effect of capital inflows on asset prices specifically on Singapore. Another point of departure in our study is the use of real capital flows in place of nominal flows. That is, the portfolio inflows series is first deflated by the stock price index while the series measuring foreign direct investment flows into the real estate sector is deflated by the property price index. We estimate the impact of real flow variables on real asset price indexes by applying the autoregressive distributed lag model (ARDL). To abstract from other variables affecting asset prices, we include key macroeconomic variables such as aggregate output, consumer price index and short term interest rate in our models. In order to differentiate between long-run versus short-run relationships we express the ARDL model in error correction form and perform Pesaran bounds test for cointegration. We test whether there is any long-term effect of real capital inflows in the stock market and the housing market on the real stock price index and the real house price index respectively. At the same time, we determine the extent of short-term dynamic adjustments in these two real asset price indexes to fluctuations in real

foreign capital flows in their respective sectors. The key findings are as follows. First, we found in each asset market a positive and statistically significant relationship between the real asset price index and real capital inflows only in the short-run but not in the long run. Second, the short-run impact of foreign capital inflow is less than that of output growth for the two asset price indexes. Third, we found momentum effects in house price inflation but not in stock price inflation. This finding provides support for the authorities' implementation of macro-prudential measures that target the housing market.

**THURS**  
**1045 am**

6 August 2015

1045am to 1205pm

Ball Room III

**Session 3.8 Environmental and Energy Economics I**

**Session Chair** Jinhua Zhao, Michigan State University

**T226 [Invited] Energy Labels vs. Regulations: How to Reduce the Number of Inefficient Electrical Appliances in Private Households**

*Renate Schubert, ETH Zurich*

Private households' energy-related behavior implies risks for global climate and for sustainable development. Often, households do not choose electrical appliances or heating/cooling systems which comply with sustainable energy systems. This paper focuses on attempts to reduce the number of inefficient electrical household appliances which could considerably contribute to lowering total energy demand increases.

One way to achieve this goal would focus on households' voluntary purchase decisions. Assuming that households behave rationally, they would choose technically efficient appliances if those are economically attractive. However, often such appliances are characterized by rather high purchase prices which amortize over the appliances' lifetime due to lower running costs. Yet, not all households are able to carry out such assessments and not all dispose of the information necessary for the assessments. In principle, energy labels can be considered as carriers of such information. They vary with respect to the information displayed and with respect to their design. We will analyze under which conditions labels might help shaping households' purchase behavior towards higher energy efficiency. It turns out that given the voluntariness of purchase decisions based on energy labels, the number of energy efficient appliances is not strongly increasing. Therefore, regulations seem to be a more appropriate way to enhance the purchase of energy efficient appliances. Such regulations will focus rather on products than on information. They are often criticized since they give too little freedom of choice to the consumers. Hence, in this paper we will also discuss the relevance and adequacy of nudging approaches.



**T560 [Invited] Unilateral policies in a North-South model with capital mobility**

*Partha Sen, University of Delhi*

In a dynamic North-South model, I look at the effects of Northern countries unilaterally deciding to reduce their emissions by cutting back on fossil fuel use. If this policy is to be put in place in the future, then the North will run a current account surplus now because its saving rises and investment falls. The South would benefit from a fall in the interest rate and the fall in the price of the fossil fuel (it follows the Hotelling Rule). Total emissions rise and the time path is brought forward in time--an environmental disaster. The paper focusses on the macroeconomic implications of environmental policies. It compliments a growing literature on the modelling of unilateral policies e.g. Van Meijedan et Al (2015), and van der Ploeg (2015).

**THURS  
1045 am**

**T245 Retail Petrol Pricing in Australia's Capital Cities**

*Ming-Hua Liu, University of Macau; Dimitrios Margaritis, University of Auckland Business School; Yang Zhang, University of Macau*

This paper examines how retail petrol prices in seven Australia's capital cities respond to changes in the wholesale prices (measured by the terminal gate prices in each capital city) using an asymmetric error correction model. Our results show that in the long term, retail petrol prices in Australia are cointegrated with the terminal gate prices. We find no evidence of excessive retail fuel price increases relative to price decreases in all the seven cities under investigation. Regarding asymmetric effect of error correction term, the speed of upward adjustment is faster than that of downward adjustment for the city of Darwin only, indicating non-competitive pricing behavior in Darwin.

**T293 Waste Disposal Privatization**

*Shuichi Ohori, Kansai University; Hiroshi Kinokuni, Ritsumeikan University; Yasunobu Tomoda, Kobe City University of Foreign Studies*

In this paper, we explore how privatization of the waste disposal affects the product durability, the amount of waste, and social welfare. Extending the two-period durable-goods model of Bulow (1986), we compare the case of disposal fee with that of lump-sum tax. We show that the disposal fee increases the durability while the lump-sum tax decreases that. Then, the disposal fee reduces the amount of waste. Privatization of the waste disposal increases social welfare in that the disposal fee drives the firm to develop the tough and long-lasting products and so decrease the amount of waste.

6 August 2015

0130pm to 0250pm

Room 831

**Session 4.1      Macroeconomics II**

**Session Chair**      Minwook Kang, Nanyang Technological University

**T117    Loving Thy Neighbor: Charity and Bequest in an Overlapping Generations Model**

*Kent Jason Cheng, University of the Philippines Diliman School School of Economics*

**THURS  
0130 pm**

This paper uses the overlapping generations (OLG) model to determine how households maximize their utility from their personal consumption, and the paternalistic bequest and the intragenerational charity they wish to give – in consideration of limited wages, savings and interest earned during working years, and initial endowment. Following Barro (1974), bequest is inspired about by pure altruism since the parents, depending on the degree of their selfishness, care for the utility of the recipient who so happens to be their children. On the other hand, charitable giving which is specified as intragenerational financial transfers can be interpreted as a manifestation of impure altruism since the giver gets a warm glow or joy of giving from the amount given. The simple model formally shows that consumption growth rate is dependent negatively on the growth rate of intragenerational transfers, and vice versa.

**T233 Have Intergovernmental Transfers Stimulated Expenditures in Japan's Local Government**

*Taro Takimoto, Kyushu University; Naoki Sakamoto, Yamagata University*

The paper investigates the revenue and expenditure nexus in the case of Japan's local public finance by using one variable of transfers from the national government to local governments and eleven types of variables of expenditures. The techniques to analyze the causal relationship depend on the properties of the series. This paper utilizes three kinds of approaches; a VAR model setting by adding the extra lags, which is provided by Toda and Yamamoto (1995), a differenced VAR modeling, where there is no cointegrating relationship between non-stationary series, and a threshold error correction specification, which is proposed by Enders and Siklos (2001).

It is found that when we use the GDP ratio data, there are no causal relationships between intergovernmental transfers and any types of expenditures and this implies that intergovernmental transfers have not stimulated expenditures in Japan's local government. However, using the nominal or real data would yield different causal relationships, as several Japanese studies observe the causal relationship from the total expenditures excluding the debt service to intergovernmental transfers. These results support spend-tax hypothesis and implies the existence of the soft budget constraint in Japan's transfer system. Thus, taking account of both of the previous studies in Japan and ours, we can conclude that the causal relationship from expenditures to intergovernmental transfers disappears by using the GDP ratio data. Thus, it may not be so serious that the soft budget constraint built in the intergovernmental transfer system worsens the fiscal situation in Japan.

**T252 Policy Distortion in Capital Market: Evidence from a Fiscal Stimulus Plan**

*Chun-Yu Ho, Shanghai Jiao Tong University; Dan Li, Fudan University; Suhua Tian, Fudan University; Xiaodong Zhu, University of Toronto*

This paper examines policy distortion in capital allocation across firms. Our empirical analysis is based on a loan-level dataset covering the period from August 2006 to July 2010 from one of the largest state-owned banks (SOBs) in China. We exploit the policy announcement of a fiscal stimulus plan in November 2008 as an exogenous shock to the bank's loan supply to show that policy intervention results in capital misallocation between SOEs and private firms and between firms in preferential industries and firms in other industries. Interestingly, our sample bank offsets part of this capital misallocation by its tightening credit risk pricing. We further show that the capital misallocation between SOEs and private firms is more severe among new firms without a credit rating available to our sample bank than among existing firms. Finally, our results are robust to the use of an alternative measure of policy intervention based on China's monetary policy stance.

**THURS**  
**0130 pm**

**T519 Land Price and Equity Premium Puzzle**

*Yun Liu, Hong Kong University of Science and Technology*

This paper presents a production-based general equilibrium asset pricing model with land. We examine whether this model can solve the excess premium puzzle and volatility puzzle together with other macroeconomic dynamics under the case of a lower-than-unity intertemporal elasticity of substitution (IES), which is proven to be a challenge in the long-run risks literature. We find that the competition for land raises the land price and further implies higher land and equity premium, higher stock return volatility, lower risk-free rate which is not volatile, as well as the co-movements among macroeconomic quantities such as land price, consumption and investment. It also explains the fact that volatility risk carries a positive risk premium. In addition this model can be applied to explain cross-sectional differences. All the results are robust in the case of a greater-than-unity IES.

6 August 2015

0130pm to 0250pm

Room 832

**Session 4.2 Financial Economics II**

**Session Chair** Chan Kee Low, Nanyang Technological University

**T290 Multivariate Copula: An Application to Emerging Financial Markets**

*Le Trung Thanh, Vietnamese German University; Marco Barassi, University of Birmingham*

In this study, we examine the dependence structure of 20 financial markets, including 19 emerging financial markets and the US financial market, using the multivariate conditional copula of two types: the Gaussian copula and the Student's t-copula. To adapt the multivariate conditional copulas to the high-dimensional portfolio containing 20 series, we replace the bivariate BEKK representation, used by the copula of Patton (2006) with the DCC specification of Engle (2002). Utilizing the flexibility of a copula function, we construct 12 copula types, each of which is formed by a choice of the GARCH(1,1) or the GJR(1,1,1) for the marginal model assumed by Gaussian or Student's t or Hansen's skewed Student's t-distribution to be coupled with the Gaussian or the Student's t-copula. These 12 copulas are estimated by the 'Inference Functions for Margins' method (IFM) which is performed via 2-step maximum likelihood estimation. The evaluation of copulas is carried out by using the AIC, the SBIC for in-sample fit and diagnostic test statistics based on the Value-at-Risk theory are used for the evaluation of out-of-sample fit. The result, indicating that the Student's t-copula with the GARCH-t margin passes the VaRbased test and is ranked in top place in all evaluations, shows that the Student's t-copula is an appropriate method to model financial dependence. Besides, the relevant choice of a univariate GARCH model for the margin has a significant impact on the performance of the copulas. The result of our study is important for financial authorities who are concerned by financial contagions and for international portfolio managers who need a precise estimator for the Value at Risk of their portfolios.

**T164 Tail Event Driven Asset Allocation: Evidence from Equity and Mutual Funds' Markets**

*Wolfgang Karl Härdle, Humboldt-Universität zu Berlin; David Lee Kuo Chuen, Singapore Management University; Sergey Nasekin, Humboldt-Universität zu Berlin; Xinwen Ni, Nanyang Technology University; Alla Petukhina, Singapore Management University*

The correlation structure across assets and opposite tail movements are essential to the asset allocation problem, since they determine the level of risk in a position. Correlation alone is not informative on the distributional details of the assets. Recently introduced TEDAS -Tail Event Driven ASset allocation approach determines the dependence between assets at tail measures. TEDAS uses adaptive Lasso based quantile regression in order to determine an active set of negative non-zero coefficients. Based on these active risk factors, an adjustment for intertemporal correlation is made. In this research authors aim to develop TEDAS, by introducing three TEDAS modifications differing in allocation weights' determination: a Cornish-Fisher Value-at-Risk minimization, Markowitz diversification rule or naive equal weighting. TEDAS strategies significantly outperform other widely used allocation approaches on two asset markets: German equity and Global mutual funds.

**THURS  
0130 pm**

**T191 Examining the Directions of Stock Index Movement and Evidence of Market Corrections in Singapore, Hong Kong and USA**

*Yeow Hwee Chua, National University of Singapore; Gamini Premaratne, Universiti Brunei Darussalam*

This paper seeks to examine the dynamic link between market information and volatility, as well as to investigate whether information revealed during the trading hours of one stock market has a global impact on the returns and volatility of the other market. Our focus here is to understand the relationships between Singapore, Hong Kong and the US. Due to the differences in market opening hours, we use the close-to-open (overnight returns), open-to-close (trading returns) and close-to-close (daily returns) in Singapore, Hong Kong and USA to determine the behaviour of these markets using time-varying volatility and correlation

Using Dynamic Conditional Correlation (DCC), our empirical results illustrate the time varying conditional correlations between Singapore, Hong Kong and the US. We show that Singapore is dependent on the information from US during its trading and non-trading hours and the information from Hong Kong during its trading hours. However, the US overnight returns are negatively related to Singapore and Hong Kong's trading returns, which is particularly intriguing. Further analysis indicates that increase in global liquidity due to Quantitative Easing in recent years have little impact on the conditional correlation between the countries. Finally, the conditional correlation between US trading returns and Singapore overnight returns fall prior to a market correction or slump in both countries, which could be an important signal to predict market downturn.



**T532 Trading Hours' Extension and the China-related Index Futures Markets**

*Yongyang Su, Hang Seng Management College*

This study examines the impact of trading hour extension on price discovery and trading volume between two highly related but segregated index futures markets. in China Mainland and Hong Kong. While The two markets are highly's index futures and two highly related but segregated markets – namely, China's China's CSI 300 futures which represent China's A-share market that is inaccessible to foreign investors, Hong Kong's China Enterprise Stock (H-share) Index futures which mirrors the performance of mainland enterprises, and the Hang Seng (HS) Index futures which is written on Hong Kong's benchmark index. Extending upon previous studies on the inter-market trading dynamics for cash stocks, the study attempts to differential the trading activities between the highly related markets during over-lapping and non-overlapping trading hours. Moreover, the study tests for the potential “cannibalization” effect of trading hour extension on the affected market. The paper finds that, consistent with extant studies, trading intensity is higher during the over-lapping trading hours than that during the non-overlapping trading hours for both markets. Most importantly, the study support the cannibalization hypothesis and shows that trading intensity declined during the “new” overlapping trading hours as the competing market extents her trading hours.

**THURS**  
**0130 pm**

6 August 2015

0130pm to 0250pm

Room 833

**Session 4.3      Chinese Economy II**

**Session Chair**      Xiaoping Chen, Nanyang Technological University

**T105    Does Product or Process Innovation Matter for Export? Evidence from Chinese High-tech Industry**

*Lin Ye, Central China Normal University; Jiang Yu, Wuhan University*

Using firm-level data of Chinese high-tech industry, we explore the distinct roles of product innovation and process innovation in export of the firm in a dual way: both in terms of export propensity and in terms of export intensity. Our study demonstrates that developing product innovation rather than process innovation, increasing product innovation intensity rather than process innovation intensity is meaningful for increasing export propensity and intensity of the firm. Additionally, process innovation is complementary to product innovation as driver of export. Our research is a good reference for firms and authorities making innovation strategies.

**T171 Research on the Innovation Efficiency and Its Affecting Factors in China's High-tech Industries Based on SFA**

*Hua Gao, Wuhan University*

The paper applies SFA method to analyze China's High-Technology industry two-stage innovation efficiency (R&D & commercialization) and its affecting factors based on panel data in 25 provinces of China from 1997 to 2008. The result shows that (1) The R&D efficiency of China's High - Technology industry is low, and the commercialization efficiency of achievements is lower than the R&D efficiency, and both are improving. Innovation efficiency of China's High - Technology industry is mainly expenditure-driven; (2) The R&D and commercialization efficiency in Eastern region are higher than the Central and Western region. The R&D efficiency in Central region is higher than the Western region, while the commercialization efficiency is less than the Western region; (3) Firm size and market competition have significantly positive correlation with R&D and commercialization efficiency. The support of financial institutions has significantly negative correlation with R&D efficiency, but has significantly positive correlation with commercialization efficiency. The government subsidies are not obvious enough in R&D efficiency, but it has significantly negative correlation with commercialization efficiency. Enterprise ' dominant role has positive correlation with R&D and commercialization efficiency, but is not significant. The laborer's quality has negative correlation with commercialization efficiency and positive correlation with R&D efficiency, but is not significant. Finally, some suggestions are provided.

**THURS**  
**0130 pm**

**T177 Credit Constraints, Political Connections, and Private Enterprise Exports: Empirical Evidence from China**

*Yue Lu, University of International Business and Economics; Ka Zeng, University of Arkansas*

Private enterprises tend to face severe credit constraints under conditions of imperfect market. This paper draws on firm-level data on Chinese private enterprises to examine the export behavior of politically-connected firms confronted with credit discrimination. Research findings suggest that political connections ease the credit constraints and therefore promote the exports of private enterprises. They further suggest that the progressive deepening of financial market reform has played some role in correcting the financial distortions caused by political connections, thereby reducing the heterogeneity in firm export behavior. In addition, compared to economic connections with foreign-invested firms, the political connections of private enterprises seem more effective in fostering exports by easing credit constraints. Consequently, instead of continuing to rely on foreign investment, efforts to improve the export financing capacity of private enterprises should put greater emphasis on domestic financial system reform.

**T300 Trade Credit in China: Panel Evidence Based on the Survey of Industrial Enterprises**

*Yajing Liu, Kobe University*

Firms use trade credit with their partners more frequently as a financing method than other options with financial institutions. In China, there are three main modes for corporate finance: Bank loans, security issuance, and trade credit. Compared to bank loans and security issuance, trade credit between business partners is a more important method for corporations, particularly small and medium enterprises (SMEs). Using a large panel dataset of Chinese industrial firms, this study finds that SMEs, and particularly small firms, are more likely to use trade credit as a financing source than formal financial channels from financial institutions. A clear distinction is made between the trade credit of suppliers and demanders, and the relationship of each group is estimated using both trade credit and bank loans. The evidence suggests that small firms use more trade credit, and have a stronger substitute relationship with using financial institutions. It is also found that ownership may not affect the use of trade credit.

6 August 2015

0130pm to 0250pm

Room 834

**Session 4.4 Behavioral Economics**

**Session Chair** Tai-Sen He, Nanyang Technological University

**T262 Sunk Cost Fallacy: Effect of Situational Knowledge on Irrational Choices**

*Balasubramanian P, Amrita University; Kalyanasundaram K, Amrita University; Aravindhan S, Amrita University*

Sunk cost fallacy or escalation of commitment is one of the cognitive biases referred as the characteristic of people justifying more investment because of the prior investment. Since the costs are beyond recovery, whether an action taken or not is irrelevant to the decision. Application of this theory in the field of agriculture is very unique and this paper aims to establish the irrational choices adopted by the farmers in selecting a crop. We selected a region in the southern part of India where coconut is the main crop. We were interested in understanding the reason behind the farmers continuing with cultivation of coconut trees with the depletion of water table in the region. A random and controlled experiment was conducted with 128 students of a School of Business. It was a 22experiment with two factors viz. visual effect and awareness on cost-benefit at two levels. The aim was to understand the impact of visual photographs and awareness on cost benefit of dying coconut trees on their decision to choose alternative crop or status quo. Results prove that there is a significant relationship between visual effect and the decision on the selection of crop in spite of clear knowledge on the cost –benefit. This proves that irrationality in choices is more exhibited when people are already committed with investment in line with the theory of sunk cost fallacy.

**THURS  
0130 pm**

**T306 “Property Tax Governance” in Multi-level-systems: A Political-Economic Comparison between the United States of America and Germany**

*Sonja Krause, University of Bremen; Melanie Nofz, University of Bremen*

The property tax is one of the oldest taxation principles and plays an important role to finance public services. Since the property tax is a tax on an immobile factor, it is reliable revenue. As the property tax varies between different countries, it becomes obvious that the “perfect property taxation system” does not exist. The property tax varies according to the impacts of the assessment base, the arrangement of the tax and its justification. Since taxation systems need precise constitutions concerning legislation, tax sovereignty and ascertainment, governance plays an important role to coordinate different political actors, institutions and strategies in multi-level-systems.

As the property tax differs between countries, the governance concept can be used to analyze structures of taxation and help to represent the complexity of a taxation system. Governance in taxation systems highlights the interwoven decision-making process and the importance of an interdisciplinary view on political-economic topics. In this context "property tax governance" is needed to have a closer look at the complex constellation of the property tax structure in different countries with a multi-level-structure. The paper is structured in the following way: First, the property tax and its importance to finance public services is described and discussed under the benefit and capital view. Second, the governance-method is used to present difficulties and challenges according to taxation systems in multi-tiered systems under the use of a comparison between the property tax system in the United States of America and Germany. Pros and cons of each system are highlighted.

**T342 Effects of the Price on Charitable Giving: Evidence Based on Time-series Data and Measures of Exogenous Tax Changes**

*Shih-Ying Wu, National Tsing Hua University; Yi-Hua Wu, Industrial Technology Research Institute of Taiwan*

Although extensive empirical studies have estimated the price effect and the income effect on individuals' charitable donations, evidence on the price effect on charitable giving is generally inconclusive (Andreoni, 2001; Fack and Landais, 2010). One line of the literature attributes the heterogeneity of the price elasticity estimates to multicollinearity among the net-of-tax price and income. This paper is thus to propose an approach to ameliorating multicollinearity among prices and income in estimating the price effect on charitable donations. We utilize time series data of charitable donations over 1917-2013 from the IRS of USA, and the exogenous tax changes proposed by Romer and Romer (2010) to estimate the price effect on individual charitable donations. Romer and Romer (2010) argue that, by using the narrative record such as presidential speeches and Congressional report to identify the principal underlying rationale for major post-war tax reforms, they are able to separate legislated changes which were taken for reasons unrelated to prospective economic conditions. These exogenous tax changes are thus uncorrelated with GDP or GDP growth and can be utilized to disentangle the price effect and the income effect in empirical studies. The estimates from a single-equation time series estimation suggest that the price elasticity and the income elasticity of individual charitable donations are -0.057 and 1.99, respectively. However, the results are very preliminary and thus not conclusive.

**T514 The Influence of Investor Network on China's Capital Allocation Efficiency**

*Yueming Bai, Nankai University; Zifeng Wang, Nankai University; Liuling Li, Nankai University; Han He, University of California, Davis*

This paper does quantitative analysis about the effect of institutional investor's behavior contagious infection towards capital allocation efficiency by the model of information network. The empirical analysis result indicates that: firstly, Chinese stock market's capital allocation efficiency is lower than the past empirical analysis based on the enterprise data; secondly, the behavior contagious of institutional investor is good for efficient capital allocation, however, the global financial crisis has changed the function of China's stock market and information network partially. The model is based on the network of institutional investor, which provides several rational suggestions towards the reform of China's finance market, gives a new method for the supervision department and offers some advices to China's institutional investors.

**THURS**  
**0130 pm**

6 August 2015

0130pm to 0250pm

Room 835

**Session 4.5 Health, Education and Welfare II**

**Session Chair** Christos Sakellariou, Nanyang Technological University

**T148 Gender, Sibling Order, and Differences in the Quantity and Quality of Education: Evidence using Japanese Twin Data**

*Tien Manh Vu, Osaka University; Hisakazu Matsushige, Osaka University*

Using 1,045 pairs of Japanese monozygotic twins, we examined differences in education by considering both the years of schooling (quantity) and the reputation of the last attended school (quality). We found that a difference in learning performance at 15 years of age is one of the key factors determining the differences. We also found that when the eldest child in the family was a female twin from the 1950s and 1960s birth cohorts, she averaged 0.542 years less schooling than did her “younger” twin sister. However, for the same birth cohorts, when the eldest child in the family was a male twin, he gained some advantage in the quality of education over his “younger” twin brother. Nonetheless, we found that as the Japanese economy has developed, any difference in education between twins has disappeared in subsequent birth cohorts, regardless of gender and sibling order.



**T335 The Effect of PTA Teachers and Government Employed Teachers on Pupils' School Outcomes in Kenya Primary Schools**

*Ayako Wakano, Osaka University*

Do locally hired teachers benefit pupils' school achievements more than governmental employed teachers? This is the question to examine in this paper. In Republic of Kenya (below referred as Kenya), there are two types of teachers teaching in public primary schools. One is those teachers employed by the government and the other is those hired by the local school community, named "PTA teachers". Although randomized experiment results have shown that the marginal product in terms of test score is positive and significant when pupils are taught by PTA teachers (Duflo et al. 2012, and Bold et al., 2013), it is not yet known about the effect of PTA teacher ratio (ratio of PTA teachers out of total number of teachers) on education outcome. In other words, the question is "should all governmentally employed teachers be replaced by PTA teachers?". With the nationally representative dataset containing rich educational school information as well as individual pupils' background variables, this paper examines the effect of locally hired teachers ratio (PTA teacher ratio) on pupils' educational outcomes.

Based on different econometric strategies such as propensity score matching and instrumental variable estimation in cross-sectional data as well as the school fixed effect estimation in panel data, it consistently shows that the PTA teacher ratio does not make any difference on educational outcomes evaluated at mean level, which supports the past observational study. Facing the shortage of teachers in public primary schools after the free primary education policy in developing countries, this evidence infers that the highly cost-effective approach of utilizing locally hired teachers is available, as wage level for PTA teachers on average in Kenya is one fourth of that of government teachers.

**THURS**  
**0130 pm**

**T351 Efficient Education Subsidization and the Pay-As-You-Use Principle**

*Bei Li, University of Western Australia; Jie Zhang, National University of Singapore*

We investigate whether the pay-as-you-use principle of public finance should apply to education subsidization for children to internalize human capital externalities in an intergenerational model with endogenous fertility, leisure, and accumulations of human and physical capital. We characterize social optimality concerning physical and human capital accumulations, leisure, labor, and fertility to guide the design of efficient education subsidization. We show that efficient education subsidization requires future generations benefiting from it pay for it when fertility and leisure are endogenous. Namely, the government should uphold the pay-as-you-use principle to subsidize children's education by deficit and repay the debt by future taxes.

**T515 Mind the Gap: What Explains Malaysia's Underperformance in PISA?**

*Liyanage Devangi Perera, Monash University; Mohammad Asadullah, University of Reading*

East Asia's phenomenal economic rise has been attributed to its early investment in human capital and the region has succeeded in raising school attainment significantly in a short span of time. Indeed, East Asian countries such as China, South Korea and Singapore dominate in international student assessments, while other countries from the region, like Malaysia, lag far behind. Differences between these high performing East Asian countries and Malaysia are more than 100 points, equivalent to about three years of schooling. We test a number of hypotheses for why Malaysia lags behind its East Asian neighbors. We do so by examining the relative importance of individual, family background, school, teacher and institutional factors in explaining observable test score differences between two high performers, Korea and Singapore, and Malaysia using data from PISA 2009 and 2012. Oaxaca-Blinder decomposition analysis is carried out to determine how much of the test score gap can be attributed to these characteristics. Our results suggest that much of the gap between the two high performers and Malaysia remains unexplained by the large, conventional set of characteristics that are typically used in the education literature, and instead indicate higher returns to characteristics in Korea and Singapore. We discuss potential policy and institution related explanations for the unexplained difference in student performance.

6 August 2015

0130pm to 0250pm

Room 836

**Session 4.6      Macroeconomics and Monetary Policy II**

**Session Chair**      Soedradjad Djiwandono, Nanyang Technological University

**T152    How Effective Are the Monetary Policy Changes Made by the Central Bank?**

*Moid U. Ahmad, Jaipuria Institute of Management Noida*

One important role of the Reserve Bank of India or any central bank is to ensure economic stability in the country. For the purpose, the central bank adopts various measures to ensure that the inflation rates, interest rates, exchange rates, money supply and other target macroeconomic parameters remain under control. It uses reserve ratios like Cash Reserve Ratio and interest rates like Repo rates to control liquidity and inflation in the country. The effectiveness of such policy and monetary rates in ensuring economic stability needs to be verified and tested. The decision maker needs to understand the effect of these changes on the affected (targeted) variable. This research is a part of the working paper on this theme and an attempt to test and verify the effectiveness of the changes in monetary and policy rates on the desired critical variables. The research is aimed to provide inputs to decision makers in formulating policies and contribute to the existing literature on the subject.

**THURS**  
**0130 pm**

**T186 Monetary Policy Analysis of a Small Emerging Open Economy using a Structural VARMA Model**

*Mala Raghavan, University of Tasmania; George Athanasopoulos, Monash University; Param Silvapulle, Monash University*

Modelling monetary policy framework of emerging or transitional economies can be challenging as these economies are usually plagued by frequent structural breaks and policy changes. The relatively short period of data availability due to structural breaks and or lack of data collection can exacerbate the problem of using the popular structural vector autoregressive (SVAR) to model these economies. In this paper, we take a step forward from the existing monetary literature, which is largely dominated by SVAR models, and apply a parsimonious structural vector autoregressive moving average (VARMA) methodology to model Malaysian monetary policy. The Malaysian economy is an interesting case study of a small emerging open economy with capital control measures imposed by the government following the 1997 Asian financial crisis. We compare the impulse responses generated by SVARMA models with those generated by SVARs for the pre- and post- crisis periods. We find that the SVARMA models produce impulse responses that are consistent with prior theoretical expectations and stylized facts under the different exchange rate regimes experienced by Malaysia. The successful construction and implementation of the SVARMA model for Malaysian monetary policy analysis, along with its promising impulse responses, indicates the suitability of this framework for other similar emerging open economies or transitional economies, especially for those that are not currently explored due to limited data availability.

**T217 Determinants of Rapid Monetary Actions**

*Jacinta Bernadette I. Rico, Waseda University*

In general, monetary policymakers face the need to stabilize output movements during an economic downturn, of which the timing of implementation is crucial. However, the speed of policy response can be constrained by economic factors and policy choices, such as exchange rate stability, financial openness, inflation targeting and net external debt. Using an ordinal probit model, this study examines 309 recession episodes from 1964-2010 in 62 countries and finds that while financial openness increase the likelihood of a fast response, pursuing exchange rate stability and holding a high volume of external debt liabilities can have the opposite effect.

**T361 Is Inflation Targeting Credible in Asia? A Panel GARCH Approach**

*Harold Glenn A. Valera, University of Waikato; Mark J. Holmes, University of Waikato; Gazi Hassan, University of Waikato*

We examine the relationship between inflation targeting and the behavior of the level and volatility of inflation for eight Asian countries over the period 1987-2013. In contrast to existing studies that rely upon time-series methods, we employ a novel panel GARCH model that accounts for heterogeneity and interdependence across countries. Our main contribution is to shed new light on the inflation targeting credibility hypothesis of lower inflation rate and inflation volatility as well as on the correlation between unanticipated inflation shocks within a panel GARCH framework. Overall, we find strong evidence of a reduction in the level and volatility of inflation that operates both from the impact of actual inflation targets and the decline in exchange rate pass-through in the post-inflation targeting period, suggesting that this regime is credible in Asia. There is also evidence that the covariance of inflation shocks among inflation targeting and non-targeting countries tends to increase and the adoption of inflation targeting is likely to raise this interdependence.

**THURS**  
**0130 pm**

6 August 2015

0130pm to 0250pm

Room 837

**Session 4.7      Macroeconomics and Macroeconomic Policy**

**Session Chair**      Siang Ng, Nanyang Technological University

**T375    [Invited] Taxes and the Tertiary Burden of a Transfer**

*Edward Tower, Duke University; Victor Yi, Duke University*

When a country eliminates a trade deficit by devaluing its currency it must reduce domestic absorption. If it does that by raising distorting taxes, it imposes a burden upon itself which may be substantial. The classic analyses of the transfer problem have not reckoned with these costs. We carry out some simulations to illustrate the importance of the issue. We tie this to the costs of eliminating the US trade deficit with China and eliminating the Greek buildup of liabilities to its creditors.

**T396    Fiscal Policy, Exchange Rate Management & Competitiveness**

*Augustine Tan, Singapore Management University*

Singapore has an exchange rate management policy which tries to balance export competitiveness and need to minimize imported inflation. The policy, however, is predicated on a conservative fiscal stance that produces a large surplus reserves and repayment is mandated when recovery occurs. At most, the elected government is allowed to use savings accumulated over the cycle of election.

Such a policy has made the Singapore dollar an appreciating currency and the Monetary Authority of Singapore has been in the happy position of accruing ever rising reserves. This has translated into confidence for foreign investors and allowed Singapore to flourish as a financial center.

Since the last General Election of 2011, however, the fear of congestion has led to restrictive use of foreign labor and rising wages without commensurate productivity increases. Moreover, concerns about income inequality and the rapidly the fiscal stance of the government may change to one of deficit financing. The exchange rate management policy will then become untenable. This paper explores the possible outcomes and alternatives.

**T017 Indeterminacy with No-income-effect Preferences and Externalities: A Re-examination**

*Yan Chen, Shandong University; Yan Zhang, Shanghai University of Finance and Economics*

We re-examine the effect of no-income-effect preferences on indeterminacy in real business cycle (RBC) models. Several papers have argued that with no-income-effect preferences, local indeterminacy is less likely to occur in RBC models with productive externalities. In this paper, we prove that Euler equation branching (global indeterminacy) always exists in these RBC models with externalities. Specifically, our analysis shows that this branching implies topological chaos in the sense of Devaney.

**THURS**  
**0130 pm**

**T185 Loss Aversion, Inefficiencies and Policy Interventions**

*Meng Li, Universidad Carlos III de Madrid*

I study a standard production economy with loss aversion preferences which macroeconomists seldom consider. Loss aversion, justified by empirical researches, implies that agents tend to hold safe assets, which may shed lights on theoretical results and policy prescriptions. I uncover that the competitive equilibrium is inefficient as long as the agent is loss averse. Numerical results show that capital stock, consumption and output decrease as loss aversion parameters increase. The Ramsey allocation rationalizes a policy intervention: the government should subsidize capital accumulation.

6 August 2015

0130pm to 0250pm

Ball Room III

**Session 4.8      Development Economics**

**Session Chair**      Ridwan D. Rusli, Nanyang Technological University

**T193    The ‘Lewis Turning Point’ in China and Its Implication for the Emergence of a ‘Middle Income Trap’: Evidence from Provincial Data**

*Claire Harvey, Charles Sturt University; John Hicks, Charles Sturt University*

Much of the academic debate surrounding China’s proximity to the Lewis Turning Point has concluded that it is on the eve of an economic slowdown. Further, it has been suggested that as the growth of the economy slows the likelihood of China entering a ‘Middle Income Trap’ increases. This paper utilizes provincial data to determine if the economy as a whole has arrived at the Lewis Turning Point and, if so, whether or not arrival at the Lewis Turning Point is associated with China entering a Middle Income Trap. The paper explicitly accounts for differences in economic development across China and the results indicate that only the most advanced of the Eastern provinces have passed the Lewis Turning Point and that per-capita income levels in these provinces has grown well beyond ‘middle income’.

**T403    Wealth and Population Growth under Dynamic Average Utilitarianism**

*Rintaro Yamaguchi, Kyoto University*

In wealth accounting and sustainability assessment, a plausible objective function consists of total intergenerational well-being divided by the present discounted value of population from the present to the future. We first characterize the non-declining wealth criterion under this dynamic average utilitarianism (DAU), as defined by Dasgupta (2001). Per capita consumption or utility change is also associated with the growth in saving. We then apply the findings to inclusive wealth index by adjusting population growth, to show whether wealth is accumulated sufficiently, in light of total versus dynamic average utilitarianism. Among other results, the DAU criterion proves to change sustainability assessment of some countries, particularly depending on the social discount rate.



**T178 A General Equilibrium Simulation on the Income Distribution**

*Toshitaka Fukiharu, Aoyama Gakuin University*

The aim of this paper is to examine if the present-day trend concerning the income distribution is compatible with the pure economic theory. Since 1990s, the declining international income inequality has been observed as the rising domestic income inequality has been discussed by Krugman, Stiglitz, and Piketty. We start with the two-country Keynesian IS model in Section I. By numerical simulation, we computed the probability of this phenomenon to be slightly smaller than 80%. When there are three countries, we computed the probability to be slightly greater than 80%. In Section II, after actually solving the strict Heckscher-Ohlin model without specifying parameters numerically, selecting those parameters randomly we computed the probability of declining international income inequality to be approximately 63%, while the one of rising domestic income inequality to be approximately 62%. In Section III, extending the strict Heckscher-Ohlin model to the three-country-three-factor-two-sector model, we computed the probability of declining international income inequality to be approximately 70%, while the one of rising domestic income inequality to be approximately 70%. Thus, we conclude that the present-day trend concerning the income distribution is compatible with the pure economic theory, and the compatibility enhances as the number of countries increases.

**THURS**  
**0130 pm**

**T383 Impact of Electrification on Child Nutritional Status in Rural Bangladesh**

*Tomoki Fujii, Singapore Management University; Sijia Xu, Singapore Management University; Abu Shonchoy, Institute of Developing Economies (IDE) JETRO*

We study the impact of electrification on children's malnutrition status in rural Bangladesh. Using Bangladesh Demographic and Health Survey data, adoption of electricity is found to positively affect children's nutritional status as measured by their height-for-age z-score. This is true even when the potential endogeneity problem is addressed by using the indicators for the quality of service delivery and infrastructure development as instrumental variables. Our results indicate that the positive effect of rural electrification on children's nutrition status comes from multiple channels including increased household income, reduced fertility rate, and improved local health facility infrastructure.

**Session 5.1 Investment, Banking and Finance I****Session Chair** Huanhuan Zheng, Nanyang Technological University**T538 Mortgage Lending and Financial Stability in Asia***Peter J. Morgan, Asian Development Bank Institute; Yan Zhang, Asian Development Bank Institute*

The main contribution of our paper is to examine the relationship between the share of mortgage lending in total lending and measures of financial stability, an area which has been little studied. Most related studies instead have looked at the effects of mortgage lending growth and general credit growth on the risk of financial crises. Even fewer studies have examined this relationship using bank-level data. We also find that the share of mortgage lending can be a useful proxy for both financial development and financial inclusion.

We estimated the effect of the share of mortgage lending by individual banks (together with some standard control variables) on two measures of financial stability--namely, bank Z-score (a measure of the probability of default of a bank, defined as the sum of the equity to assets ratio and the mean return on assets divided by the standard deviation of the return on assets) and bank non-performing loans (NPLs) as a proportion of gross loans by banks--for a sample of 212 banks in 19 emerging Asian economies for the period 2007-2013 from the Bankscope database. We used both OLS controlling for country-level and time fixed effects and the system-GMM dynamic panel method, the latter to control for endogeneity. We find some evidence that an increased share of mortgage lending is positive for financial stability, specifically by reducing the ratio of non-performing loans (NPLs) and lowering the probability of default by financial institutions, at least in non-crisis periods, for levels of mortgage shares up to 30%-40%. For higher levels of mortgage lending shares, the impact on financial stability turns negative, which suggests that excessive concentration of lending in this area increases financial system risk. These results are confirmed with both the OLS and GMM regressions. This finding most likely reflects the effect of a higher share of mortgage lending in diversifying the mix of banks' assets and thereby reducing overall risk. If the share of mortgage lending is too high, then the diversification effect diminishes. The challenge is to balance the expected improvement in financial stability due to asset diversification against negative impacts that might result from easier lending standards or too rapid increases in mortgage lending that could trigger a bubble in the housing market. This highlights the need for prudent monetary policy and macroprudential policy measures to forestall the development of such bubbles.

**T272 Overconfidence, Gender Characteristics and Trading Performance in an Experimental Financial Market**

*Woon Wong, Cardiff Business School; Xinran Zhao, Cardiff Business School*

In this paper we investigate individual's overconfidence within the context of an experimental asset market. We relate overconfidence, gender characteristics and different ability in judgment to individual's trading performance. The most robust finding in the psychology of judgment is that people are generally overconfident and the evidence of this overconfidence has been found in several contexts. The gender difference in overconfidence is highly task dependent. For example, though both males and females exhibit overconfidence, psychological research found that, in areas such as finance, men are more overconfident than women. In financial markets, theoretical models predict that overconfident investors trade excessively. As a consequence, over trading is hazardous to investors' wealth and performance.

**THURS**  
**0450 pm**

**T388 Managerial Reputation and Market Discipline**

*Koji Asano, Osaka University*

This paper studies delegated investment choices in which the managers are concerned with their reputations. Their reputation building is attributed to credit market imperfections that allow investors (i) to pour more their funds into managers with better reputation, and (ii) to run on ones with bad reputation below the threshold and fire them.

In the monopolistic credit market, the manager with low pledgeability faces serious threat of withdrawals and thus become conservative. In the competitive credit markets, the growing demands for credit increase the interest rate and thereby even managers with low pledgeability engage in risk-taking.

**T443 Investor Preference for Speculation and Information Efficiency of Stock Prices**

*Chin-Wen Hsin, Yuan Ze University*

This study examines stock price delays to market information across emerging stock markets, with particular attention being addressed to those stocks paying extreme payoffs, i.e., lottery-type stocks. Delay measures are computed for stocks relative to local market and world market information, with further differentiation being made between positive and negative information. Results find strong evidence for most emerging markets that lottery-type stocks tend to exhibit more pronounced delays to local as well as world market information, to positive as well as negative information. That is, stocks with extreme returns are slower in their price adjustment toward local and global market information. Analysis over aggregated emerging market stock sample finds that for a market experienced with a greater premium for lottery-type stocks, stock prices on average are slower in response to local market and, global market information. Evidence of this study provides support to the claim that investor clientele with gambling preference in their asset choices is likely to deteriorate informational efficiency of prices in a market.

**T135 Hidden Skewness: On the Difficulty of Multiplicative Compounding under Random Shocks**

*Ludwig Ensthaler, Humboldt University Berlin; Olga Nottmeyer, IZA Bonn; Georg Weizsäcker, Humboldt University Berlin; Christian Zankiewicz, German Institute for Economic Research (DIW Berlin)*

Multiplicative growth processes that are subject to random shocks often have an asymmetric distribution of outcomes. In a series of incentivized laboratory experiments we show that a large majority of participants either strongly underestimate the asymmetry or ignore it completely. Participants misperceive the outcome distribution's spread to be too narrow-band and they estimate the median and the mode to lie too close to the distribution's center. The observed bias in expectations is irrespective to risk preferences and it appears under a variety of conditions regarding feedback, incentive size, and market contexts. The bias is largely consistent with a behavioral model in which geometric growth is confused with linear growth. This misperception is a possible explanation of investors' difficulties with real-world financial products like leveraged ETFs and is also related to issues regarding real estate investments, retirement savings plans or investments in college funds.

6 August 2015

0450pm to 0630pm

Room 832

**Session 5.2 Econometric and Statistical Methods and Methodology II**

**Session Chair** Qu Feng, Nanyang Technological University

**T222 Microeconometric Analysis of Eating-out Behavior of Modern Filipino Households: The Tobit, the Craggit and the Heckit Models**

*Cesar C. Rufino, De La Salle University – Manila*

Despite the economic and commercial importance of food consumption away from home, very limited attempt has been made to investigate the evolution and economics of this type of food consumption among Filipinos over time. This study hopes to set the pace among local researchers in taking advantage of the availability of high quality primary data of nationwide household surveys to generate useful insights on the “eating out” behavior of modern Filipinos. The study will endeavor to establish the linkage between food demand behaviors and socioeconomic and demographic characteristics of households, highlighting on the difference between wealthy/not wealthy consumers and the increasing role of time constraint on the part of household members in their decision to "eat out". To supply the dynamic content of the analysis, public use raw data files of several rounds of the Family Income and Expenditure Survey (FIES) are used. Relevant microeconometric models which address censoring, truncation and sample selectivity issues as well as the complex nature of the survey are also implemented. Results of the study confirm the significant co-variation of FAFH consumption of Filipino households with its postulated determinants, the empirical relevance of Engel's Law and the establishment of FAFH as a necessity during the modern era.

**THURS**  
**0450 pm**

**T444 Maximum Score Estimation of the Binary Response Model with Additive Latent Equation**

*Jerome M. Krief, University of Miami*

This paper considers a binary response model whose latent equation has an additive form with  $d$  unknown functions of interest. A dimension reduction estimation method (i.e rate of convergence is not a function of  $d$ ) is attractive because it estimates accurately high dimensional models. However, existing dimension reduction methods either impose stringent parametric assumptions or restrict heteroscedasticity. This paper describes a dimension reduction technique which removes these impediments. Furthermore, the rate of convergence in probability is equal to  $N^{\frac{r}{2r+3}}$  where  $r$  pertains to the smoothness of the additive functions. Moreover, a researcher may construct a C.A.N. estimator which enjoys an oracle property in that the asymptotic variance achieved for estimating one function is the same as when the other functions are known.

**T067 A Bayesian Approach to Modelling Bivariate Time-varying Cointegration and Cointegrating Rank**

*Chew Lian Chua, The University of Melbourne; Sarantis Tsiaplias, The University of Melbourne*

A bivariate model that allows for both a time-varying cointegrating matrix and time-varying cointegrating rank is presented. The model addresses the issue that, in real data, the validity of a constant cointegrating relationship may be questionable. The model nests the sub-models implied by alternative cointegrating matrix ranks and allows for transitions between stationarity and non-stationarity, and cointegrating and non-cointegrating relationships in accordance with the observed behaviour of the data. A Bayesian test of cointegration is also developed. The model is used to assess the validity of the Fisher effect and is also applied to equity market data.

**T550 An Econometrics Analysis of the Underground Economy in Oman: Evidence from Gregory-Hansen Cointegration Based Currency Demand Approach**

*Awadh Ahmed Mohammed Gamal, Universiti Utara Malaysia; Jauhari B. Dahalan, Universiti Utara Malaysia*

This study attempts to estimate the size of the underground economy, illegal money and tax evasion in the economy of Oman over the period of 1991:1-2010:4. The study uses the Gregory and Hansen cointegration test based on the recent form of the currency demand approach as a proxy to quantify the underground economy. As a percentage of the official GDP, the size was, on average 32.35%. It was 32.55% of the official GDP in 1991:Q1 and 29.95% of the official GDP in the last quarter of 2010. The average size of the illegal money to the money outside the banks has reached about 49.78%. However, the average rate of the tax evasion to the official GDP constitutes 2.92% over the study period.

As for the stability test, the plots of the CUSUM statistic for  $\ln(M1)$  lies within its critical value lines, and hence, it indicates that the Omani money demand model is stable. However, the plot of CUSUMSQ statistic crosses its critical value lines, thus indicating some instability in the Omani money demand model  $\ln(M1)$  during the period of 1997:Q3-1999:Q2. The instability may attribute to the influence of the Asian Financial Crisis on the economy of Oman.

**THURS**  
**0450 pm**

**T228 All Together Now! - A Survey of the GPGPU Parallel Paradigm in Economics**

*Eric M. Scheffel, University of Nottingham Ningbo*

In this paper we present a comprehensive and up-to-date survey of the nascent GPU computing literature as it has hitherto been applied to both theoretical and applied economics. Presenting a structured bird's eye view of this technical field is of much relevance, as we will argue, given that current and future GPU hardware improvements will continue to disrupt scientific modes of inquiry in a positive fashion and very plausibly also at an exponential rate. We lend support to this assertion by presenting two case studies illustrating how GPU hardware can be efficiently exploited in economics. We outline technical implementation details and results obtained from solving a popular heterogeneous agent macroeconomic model and from estimating non-linear and non-Gaussian state-space models by means of a GPU-accelerated Bayesian particle filter. We document speed gains which vary between 1 to 3 orders of magnitude and argue that researchers tapping GPU technology are likely to generate more innovation through both more rapid experimentation cycles but also by being able to numerically solve more complex models feasibly by harnessing such hardware. Finally, we offer a glance into the near future and discuss how upcoming iterations of GPU or competing hardware are likely going to continue to affect the field. In conclusion we argue that the rapid improvement of such parallel hardware equates to a positive technology shock benefiting any scientific application employing a "solution-by-simulation" approach, and that based on this technology-driven perspective GPU-accelerated solutions to economic problems share many similarities with the "big data" paradigm.



6 August 2015

0450pm to 0630pm

Room 833

**Session 5.3      Public Economics II**

**Session Chair**    Giovanni Ko, Nanyang Technological University

**T170    Basic and Applied Research: A Welfare Analysis**

*Kunihiko Konishi, Osaka University*

This study constructs a variety expansion growth model that integrates basic research to analytically examine its effects on household welfare. In our approach, the research sector consists of applied and basic research components. The former creates blueprints and expands the variety of goods available for consumption, whereas the latter adds to the stock of public knowledge. The two sectors interplay through knowledge spillovers. The analysis reveals two key results. First, the steady-state welfare-maximizing level of basic research is below the steady-state growth-maximizing level. Second, a reduction in the level of basic research raises household welfare if the level of basic research is initially at the steady-state welfare-maximizing level.

**THURS**  
**0450 pm**

**T155    Social Norms and Governance: The Behavioral Response to Female Leadership**

*Lata Gangadharan, Monash University; Tarun Jain, Indian School of Business; Pushkar Maitra, Monash University; Joe Vecci, Monash University*

This paper uses data from an artefactual field experiment and surveys conducted in 40 Indian villages to examine whether men and women respond differently to women as leaders and the reaction of female leaders to men's perceptions. We investigate the extent to which behavior towards leaders is influenced by experience with female leaders. We find evidence of a significant male backlash against female leaders. We examine reasons for this male backlash, and whether it persists over time. Our results suggest that this resistance is due to violation of social norms when women are assigned positions of leadership. Increased exposure to female leaders reduces the extent of bias.

**T158 Optimal Disability Insurance and Unemployment Insurance with Cyclical Fluctuations**

*Hsuan-Chih Lin, University of Wisconsin-Madison*

This paper studies the optimal joint design of disability insurance and unemployment insurance in an environment with moral hazard, when health status is private information, and cyclical fluctuations. I show how disability benefits and unemployment benefits vary with aggregate economic conditions in an optimal contract. In a special case of the model, I first show the optimal contract can be solved explicitly up to a system of non-linear equations. I then demonstrate that the optimal joint insurance system can be implemented by allowing workers to save or borrow using a bond and by providing flow payments and lump-sum transfers (or payments), where the interest rates and the amounts paid (transferred) depend on the employment or health status of the agent and the state of the economy. Finally, I consider a calibrated version of the full model and study the quantitative implications of both the current system and the optimal system. In the optimal system, disability benefits are designed such that the system punishes workers who stay unemployed for a long time. I consider the welfare impact of changing from the current system to the optimal one when both systems provide the same ex-ante utility to the worker. The cost savings incurred from incentive problems are substantial, ranging from 45 percent to 201 percent for different workers, and the unemployment rate could be reduced by roughly 50 percent.

**T410 Possible Effects of the Philippine Sin Tax Reform on Women's Smoking Behavior**

*Miguel Antonio Estrada, University of the Philippines*

After the great debate on the Sin Tax Reform Act of 2012, Filipinos have been waiting for initial findings on whether or not the policy is true to its promise. The proposal was pushed primarily as a health measure, aimed at curbing the smoking problem. We try to answer the question by looking at the policy's effects on women's smoking behavior. The decision to smoke and the intensity of smoking are two important aspects that we address. Using a proxy variable for the year of implementation, we will try to find out if the policy significantly affects both smoking participation and smoking intensity. We pool data from the National Demographic and Health Survey (NDHS) and run logit and ordinary least squares estimation. From the results, we assess if indeed, the reforms have helped women make progress insofar as smoking participation and intensity are concerned. The findings are among the first to examine the effects of the tax policy implemented almost 3 years ago.

**T142 Institutional Determinants of Public Sector Efficiency: A Cross-national Empirical Study with Two-Stage DEA Method**

*Yanyan Gao, Southeast University; Qin Zhou, Southeast University*

This paper investigates the institutional determinants of public sector efficiency using a cross-national data from 117 countries in the period of 2001 to 2010, with a two-stage DEA method. The first-stage DEA method finds two types of efficiency frontiers, developing-country frontiers and developed-country frontiers, and governments in developed countries on average have better efficiency than those in developing countries. Tobit estimation in the second stage finds that not the level of democracy but the persistence of democracy and current regimes contributes robustly to public sector efficiency by providing high quality institutions with respect to property rights protection and freedom from corruption.

**THURS**  
**0450 pm**

**Session 5.4      Banking and Financial Intermediaries****Session Chair**    *Zhe Fu, The George Washington University***T327    Comparison between Traditional and Econometric Methods Used to Estimate the Economic Efficiency of a Bank's Branches***Jacek Barburski, Cracow University of Economics*

Evaluation of the economic efficiency of financial institutions is an extremely important area of the evaluation of their activities. Such evaluation relies on a variety of methods and approaches. And although, to date, there have been many studies in this field, it should be pointed out that there is still a need to seek new methods, supplement some methods with other ones, use the so-called integrated methods, and compare the results of different studies. It often transpires that there is disparity between results and efficiency rankings drawn up on the basis of different measurement methods. For example, studies by Berger, Hancock and Humphrey [1993] and English, Grosskopf, Hayes and Yaiswarng [1993] indicate that the inefficiency of results of US banks is much larger than "inefficiency of expenditure". One can show numerous other examples proving that efficiency studies have not kept pace with changes in the financial services sector in terms of time and scope.

The proposal to use stochastic frontier models to measure and analyses the efficiency of the production process (Aigner, Lovell and Schmidt [1977] and Meeusen and van den Broeck [1997]) coupled with the development of a microeconomic model of a financial institution (Sealey and Lindley [1977]) made it possible to develop a new approach to the evaluation of the efficiency of financial institutions. The main aim of this paper is to make a comparative analysis between traditional (indicator based) and econometric methods used to estimate the economic efficiency of a major Polish bank' branches. The main aim will be achieved in two stages. First, the author will measure its economic efficiency by means of carefully selected indicators gauging the efficiency of activities in the area of costs, revenues and profit. The second stage will involve measurement of branches' economic efficiency by means of specified stochastic frontier models of costs, revenues and profits. The proposed research hypothesis, which will be subject to verification is as follows: one should expect a close correspondence between the results produced by traditional and econometric evaluation methods of bank branches' economic efficiency used in the studies. In the conclusion, the author will mainly focus on the correlation between the results of the evaluation of the economic efficiency of the analysed entities.

**T343 Does Bank Restructure Lead to Higher Efficiency? An Investigation of the Vietnamese Banking System**

*Xuan Vinh Vo, University of Economics Ho Chi Minh City; Huu Huan Nguyen, University of Economics Ho Chi Minh City*

This paper focuses on the impacts of bank restructure on bank efficiency. We use a data set of commercial banks in Viet Nam from 2005 to 2013. Using a stochastic frontier analysis, we relate the restructuring measures to bank efficiency. The results indicate that while bank inefficiency is often indicated as a principal source of banking crises in developing countries, effectiveness of various policies is rarely explored and integration policies of government would positively impact on bank efficiency, empirical research can be found on the relationship among market share, ownership, and bank efficiency in Viet Nam.

**T194 Measuring Systemic Risk Potential across Banks in Asia**

*Jones Odei Mensah, University of Brunei Darussalam; Gamini Premaratne, University of Brunei Darussalam*

The unusual severity of the recent global financial crisis has drawn much attention to systemic risk, particularly its measurement, and the institutions that contribute most to it. This paper provides an empirical examination of the systemic risk potential among banking institutions in Asia using CoVaR and Granger causality network approaches. The empirical evidence for a potential systemic crisis among Asia banks is ambiguous. The analysis reveals that the degree of interconnectedness has general gone up among banks in Asia. Nevertheless, the causal network among the banks has become less dense after the global financial crisis in 2007-2009. Banks from developed Asia economies generally rank higher compared to those from emerging market counterparts. Finally, we find that the greatest contributors to systemic risk are not necessarily large banks.

**THURS**  
**0450 pm**

**T238 Efficiency of Financial Intermediaries for People's Credit Bank in Indonesia : Data Envelopment Analysis**

*Ade Maulana R. H., Universitas Padjadjaran ; Heriyaldi, Universitas Padjadjaran;*

Bank Indonesia, Indonesian Central Bank, has launched financial inclusion as national strategy. The objective for its policy to encourage the bank for their intermediary activity. On the other side, BPR(Bank Perkreditan Rakyat), People's Credit Bank which is broadly recognized to have very active part in helping access for poor households and SMEs to micro-credit & micro-lending. The relationship between financial inclusion, economic growth, poverty has been proven globally through extensively research. World Bank has conducted a survey in 2011, only 20% adults population who has account in banking. Inefficiency is one of major cause to access largely as financial intermediaries in Indonesia. Nevertheless, limited evidence through comprehensive researches which provided efficiency on rural banking particularly in Indonesia.

This paper investigate efficiency BPRs base on provinces in Indonesia over the period 2008 and 2013 by using panel data for 33 provinces through Data Envelopment Analysis (DEA) using variable return to scale - input oriented methodology. In this study, we involved some input and output variables, such as: total assets, amount of saving, amount of deposit, loan, total number of customers, deposit's customers, saving's customers, interbank passiva and activa, debtor's customers, borrowings, number of BPRs. Finally, through three models which have been developed from 33 provinces, only one province: Jawa Tengah which has been efficient score.

**T540 Financial Intermediation Cost and Income Inequality**

*Zhe Fu, The George Washington University*

This article studies the effects of a financial reform, which reduces or eliminates financial intermediation cost, on economic growth, income inequality and welfare. By studying a heterogeneous agent model with financial intermediation, we could find that: (1) Reducing the cost of financial intermediation could promote the accumulation of capital and increase output by lowering the interest rate faced by firms while increasing the interest rate received by households. (2) The income and wealth inequality (measured by Gini coefficients) are reduced in the long run with the financial reform, but the distribution of income becomes more skewed in relatively early years after the reform. (3) There are large welfare gains on average with the reform. However, the redistribution in the transition implies more inequality in the consumption and thus poor households gain less than the wealthy households. The model predictions in this paper are qualitatively consistent with evidences found in many empirical studies.

**THURS**  
**0450 pm**

6 August 2015

0450pm to 0630pm

Room 835

**Session 5.5 Labor and Demographic Economics I**

**Session Chair** Soon Beng Chew, Nanyang Technological University

**T259 Probationary Contracts, Employment Protection and Work Incentives in the Frictional Labour Market**

*Makoto Masui, Soka University*

We develop a Pries-Rogerson-type matching model to address situations in which the quality of worker-firm pairs is not observable to both workers and firms and workers' effort choices are their private information. In this paper, the productivity of each job match is stochastically determined, and there are different types of jobs for which workers on probation cannot receive severance payments, while workers in other jobs do receive these payments when they are dismissed. Using this framework, this study examines how changes in the lengths of probationary periods and in the composition of dismissal costs affect job creation and work incentives. Then, major results are summarized as follows. First, policies of shortening probationary periods and a lower share of the transfer components of dismissal costs decrease the creation of new jobs. Second, these policies increase the incentives of workers in a regular contract to put in greater work effort. Finally, shorter probationary periods increase the equilibrium unemployment, provided that the hiring threshold for probationary jobs is reduced.

**T199 Historical Return to Education in Malaysian Labor Market after Independence**

*Hazrul Shahiri, Univeriti Kebangsaan Malaysia*

The present paper examines the post-colonial ethnics' return to education in the Malaysian labor market during the 1960's. The analysis is based solely on data obtained from the West Malaysia Family Survey 1966-67. Using two stages least square regression, the study finds that individual return to education was positive during the period examined. However, a detail analysis shows that the return to education of particular ethnicities differed from one another. The findings suggest that equal education for all does not guarantee that each ethnic group will receive equal wages unless there are some interventions in the labor market.



**T358 Cost-Benefit Analysis of Macro-focused Union Membership with Non-collective Bargaining Benefits**

*Soon Beng Chew, Nanyang Technological University; Yang Tang, Nanyang Technological University*

In contrast with traditional Micro-focused unions, a Macro-focused union aims to set competitive wage without adverse effect on employment. However, this may cause the free-ridership problem since Macro-focused union protects not only the interests of union members, but those of the non-unionized workers as well as future employees of the economy. Therefore, a Macro-focused union needs to provide non-collective bargaining benefits to entice workers to join the union. Two important issues then arise naturally: (1) How the Macro-focused union manages to fund the non-collective bargaining benefits? (2) How the equilibrium union membership is determined? What are the potentially important factors that may affect economic membership rate? This paper attempts to develop a quantitative framework to address those questions. In our theoretical model, each variety good is produced by a monopolistic firm, which either belongs to a commercial sector or a union-cooperative sector. Firms in the union-cooperative sector will provide price discount only to union members. Those discounts are financed by tax-exemption policy, donation and union membership fees. Workers are assumed to be heterogenous in their preference against being a union member. Each period both union size and price discount are endogenously determined in our model. We also perform various numerical exercises to quantitatively assess how much the union size may be influenced subject to changes in preference parameter and policy instruments

**THURS**  
**0450 pm**

**T216 The Cost of Being a Black Sheep: The Employment Discrimination of GMS Migrant Workers in Thailand**

*Charamporn Holomyong, Mahidol University; Kathleen Ford, University of Michigan*

Racial discrimination in the workplace reduces efficiency and harms economic fluidity. In Thailand, a developing nation in South East Asia that largely imports the working-classes from the Greater Mekong Subregion, racial discrimination rears its ‘ugly head’ in the workplace. Objectives: This paper explores the cost of discrimination incurred by migrant workers drawing on the concept of taste-based discrimination, the first economic model of discrimination. It determines whether prejudice in the workplace and other factors implied from the theory influenced employment discrimination. This paper analyzes both pecuniary cost in the form of failure to claim their minimum wage payment and non-pecuniary cost in the form of backbreaking burdens in enslaved hard work and 3Ds-tasks. Data: The study utilized data from 3,555 migrant workers in Thailand in 2014 originated from Myanmar, Cambodia, and Lao PDR. Results and Discussion: The subordinated status of migrant workers served as a latch pin for the exploitation of wage payments to workers. Possession of a work permit, degree of social participation, and duration of migration influenced wage discrimination. On the other hand, job segregation was influenced by the attitude of those who gain superiority in the avenues of power in the workplace, which juxtaposes to the implication of taste-based discrimination. Regression analysis showed that prejudice, wielded by employers played an essential part in careering migrant workers toward hard work with long working hours coupled with 3Ds tasks. Unsurprisingly, globalization could drive out all forms of discrimination as it opens the gate for competition in economy.

**T506 Earnings, Employment and Income in China: Does Communist Party Membership Matter?**

*Mohammad Asadullah, University of Reading; Saizi Xiao, University of Malaya*

This paper revisits the impact of Communist Party membership using China General Social Survey (CGSS) data set for the period 2005-2010. We assess impact in term of labor market participation and performance outcomes. The earnings function is specified following the standard Mincerian earnings function model with direct control for health and educational endowments. In order to reduce concern over endogeneity of Party membership status, we additionally control for parent's education and Party membership status when the respondent was an adolescent. Analysis of membership data reveals evidence of positive sorting: educated and taller individuals are more likely to join the Party; parental Party membership also matters. However, Party membership pays off even among individuals who have similar education and health status -- membership leads to significantly higher wages and probability of obtaining an off-farm job. While labor market returns to Party membership compare favorably to that of schooling and height, there is notable heterogeneity in the data. Party membership matters more in urban locations while education and health effects dominate as determinants of earnings in rural areas. Similar results are obtained when impact is assessed on per capita household income. Overall evidence indicates persistent gains from Party membership in terms of earnings even though membership has risen during 2005-2010 and Chinese economy has become more market-oriented.

**THURS**  
**0450 pm**

6 August 2015

0450pm to 0630pm

Room 836

**Session 5.6      Macroeconomics III**

**Session Chair**    *Ahiphat Muthitacharoen, Chulalongkorn University*

**T432    Gauging Households' Debt Tolerance: Evidence from Thailand**

*Athiphat Muthitacharoen, Chulalongkorn University*

Understanding households' debt tolerance has direct implications on policies addressing high household debt in many developing economies. This study defines the debt tolerance as the ability to cope with debt without suffering from anxiety and provides empirical evidence based on a survey on Thai households in 2013. Using the IV probit model, the findings indicate that factors important to the debt tolerance include not only debt burden and financial cushion but also income security, financial history, and financial discipline. This suggests that addressing the debt tolerance issue requires a multi-faceted approach. It also highlights the relatively low debt tolerance among households in precarious jobs including farmers, general workers and business owners. The results are robust to a number of alternative specifications.

**T242 Liquidity Shock, Animal Spirits and Bank Runs**

*Qiao Huang, Nanyang Technological University*

After the Great Depression, it seems that bank runs, a kind of classical phenomenon has become the rare event as the thorough security system intervened. Yet the old-fashioned bank runs recurred in UK in 2007 and large number of depositors waited in line outside the branch offices of a bank called Northern Rock. Besides, the new-fashioned bank runs appears with numerous financial institutions withdrawing deposits from core financial institutions during this financial crisis period. Until now, a lot of investors still suffer from the panic of this turmoil although the real economy has gradually recovered.

The new Keynesian model, however, only considers the aggregate outcomes and liquidity shock factors with the lag terms while this paper studies the bottom-up model that concerns the micro-behavior with the animal spirits—limited rational and adaptive-learning ability, The behavior model with endogenous waves of optimism and pessimism is introduced. Furthermore, a heterogenous agent model is extended, which has figured out the tipping point of the emergence phenomenon before bank runs and provided a guide for the implement of monetary policy by the central bank

**THURS**  
**0450 pm**

## **T237 Excess Liquidity and Commodity Boom**

*Sanae Ohno, Musashi University*

This paper presents an investigation of whether excess liquidity has been serving as a driving force for the increase in international commodity prices. Increased global excess liquidity exacerbated by the eased monetary policy of economically developed countries after the burst of the IT bubble, coupled with the development of commodity index investment, as well as the prominent economic growth of emerging countries might have promoted the increase in international commodity prices. This study uses a structural VAR model including two global liquidity indicators and the world production index to examine the determinants of international commodity prices.

Results obtained from the empirical analysis are as follows. First, the contribution of TED (an indicator of funding liquidity in the international interbank market) to international commodity prices probably increased after the IT bubble burst when the drastic easing of monetary policy began in economically developed countries, which implies that the lending of tolerant international bankers promoted commodity price increases before the global financial crisis while the international liquidity squeeze brought about their decline after the Lehman Shock. Gold is exceptional. The impact of a severe liquidity squeeze on the gold price was not confirmed during the Lehman Shock, implying that gold acted as a safe haven during the period of international financial dysfunction. Results show a negative relation between international commodity prices and the dollar effective exchange rate. The US net external debt has expanded drastically since 2003. From this negative linkage, we presume that fear for the dollar as a key currency caused by expanded net external debt produced a shifted investment demand for commodities from the US dollar. The prices of industrial metals are more attributable to funding liquidity. The price of crude oil, with a market believed to be more vulnerable to speculative money inflows, has been less dependent on liquidity. It is affected by idiosyncratic factors including geopolitical risk.

**T423 Matched-sign Discounting and Neoclassical Consistencies**

*Prapas Bawornbancha, Thammasat University*

This research proposes a theory of matched-sign discounting which can reconcile a fundamental inconsistency in neoclassical macroeconomics. The proposed theory bases on a mathematical fact that a consumer who prefers present over future consumption has negative discount rate if his future utility being discounted is represented by a negative number. Three important neoclassical macroeconomic models are reassessed by replacing the positive discount rate condition by matched-signed-discounting (MSD) condition. The reassessment results turn out to be remarkable: first, the neoclassical growth (RCK) model is found fitting all historical stylized facts very well, second, Mehra and Prescott's equity premium puzzle is resolved by the model itself, and third, Lucas' welfare gain from eliminating consumption risk is found to be not trivial, it is more than four-fifths of the welfare gain from ending ten percent inflation.

**THURS**  
**0450 pm**

**T084 Analysis of the Classic Keynesian Theory for 3 Countries Based on a New SVAR Model**

*Wen Wang, Nankai University; Jiayi Zhu, Yale University; Qiwei Yang, The Ohio State University; Liuling Li, Nankai University; Bruce Mizrach, Rutgers University*

Similar to Breitung (2000), we empirically test following two hypotheses with a new SVAR model: Can this model beat the SVAR model of Bernanke (1986)? Is the classic Keynesian theory of Hansen and Hicks (1937) still alive in US, Canada and UK? This new SVAR model is based on non-Normal margins of SSAEPD in Zhu and Zinde-Walsh (2009) combined by Gaussian Copula. Parameters are estimated by MLE and Matlab. Empirical results show: 1) The new model performs better than that of Bernanke (1986) by AIC. 2) The classic Keynesian theory of Hansen and Hicks (1937) is still in US, Canada and UK.

6 August 2015

0450pm to 0630pm

Room 837

**Session 5.7      Financial Economics III**

**Session Chair**      Manu Bhaskaran, National University of Singapore

**T192      Endogenous Fundamental, Financial Bubbles and Wealth Accumulation**

*Weihong Huang, Nanyang Technological University; Yu Zhang, Nanyang Technological University*

We build a heterogeneous agent model on financial economics, in which a goods market and a stock market coexist. The true fundamental value in the stock market is endogenously determined by the production output in the goods market following a Cobb-Douglas production function. Heterogeneous agents participate in both markets and their investment decisions link these two markets. Special attention is paid to the long-run equilibrium of production, the emergence of stock bubbles and the recurrence of stock cycles. Our model shows that a prosperous stock market may accelerate the formation of bubbles by drawing resource from future production. Though chartists are less wealthy and holding smaller stock position than fundamentalists, they are capable to show large impact on the stock market.



**T071 International Sign Predictability of Stock Returns: The Role of the United States**

*Henri Nyberg, University of Helsinki; Harri Pönkä, University of Helsinki and CREATES*

We study the directional predictability of monthly excess stock market returns in the U.S. and ten other markets using univariate and bivariate binary response models. Our main interest is on whether there are benefits in predicting the return signs from these markets jointly, focusing on the predictive power of the U.S. markets to other markets. This is examined with a new bivariate probit model that allows for a contemporaneous predictive effect from the U.S. to the other markets. Our in-sample and out-of-sample forecasting results are in favor of this new bivariate probit model, suggesting gradual diffusion of information from the U.S. to the other markets and yielding superior predictive performance over the competing models by statistical and economic measures.

**THURS  
0450 pm**

**T496 Openness and Financial Stability**

*Madhavi Pundit, Asian Development Bank; Arief Ramayandi, Asian Development Bank; Christopher F. Baum, Boston College and DIW Berlin*

This paper investigates the relationship between a country's financial openness and its domestic financial stability. We evaluate the relationship between components of gross capital flows and various measures of financial stability for 16 emerging and newly industrialized economies by considering the levels of gross capital flows. For each measure of financial stability, we employ systems of seemingly unrelated regression (SUR) estimators to allow for complete flexibility of the estimated relationships while allowing for cross-equation restrictions to be tested and, if warranted, imposed on the equation system. The findings suggest that although there are significant effects of gross capital flows on the financial stability proxies after controlling for a number of macroeconomic factors, the effects are not homogeneous across our sample economies.

**T449 Finance Development and Innovation: The Role of Political Institutions**

*Chun-Yu Ho, Shanghai Jiaotong University; Shaoqing Huang, Shanghai Jiaotong University; Hao Shi, Shanghai Jiaotong University; Jun Wu, Shanghai Jiaotong University*

This paper examines the effects of financial development and political institutions on innovation based on a dataset covering 67 countries over 1970-2010. We find that financial development only promotes innovation when the country's political institution is sufficiently democratic. A more competitive banking market, a higher stock market turnover rate and an improvement of intellectual property rights (IPR) protection are channels through which democratization of political institutions induces the innovation enhancing effect of financial development. The positive complementary effect between democratic political institutions and stock market development on innovation increases with country income, and stock market development is more effective in promoting high-quality innovation when political institutions become more democratic. Further, tightening the constraint on power of leaders and opening up the executive recruitment process are more effective than promoting political competition to foster innovation. Our findings are robust to the use of alternative measures of democracy, innovation and financial development.

**T536 Can Risk Attitude on Stock Market Affect Investors' Lending Decision? Evidence from P2P Lending Platform of China**

*Xue Chen, Shenzhen University*

Information asymmetry about the default risk between borrowers and lenders would decrease the lending market efficiency. On the peer to peer lending platform the lenders could identify the borrowers' default probabilities through the interest rate they proposed and other public information on the websites. The micro information implied about a higher default risk would affect the lenders decision via increasing numbers of participants in completed biddings and the time required to raise the biddings which has been testified by the previous researchers. However, the effect of macro variables on the lenders decisions is lack of investigation. Using the financial decisions data of 1178049 investors from a peer-to peer lending platform in China from 2009 to 2015, this paper finds macro risk attitude toward the stock market would also affect their lending decisions, when the risk aversion on the stock market is lower, there is a "take-off-guard" effect which shows a decreasing number of participants in completed biddings and the time required to raise the biddings after controlling the amount of bidding and the default probabilities. When introducing the interaction terms into the regression model we also find that investors' "take-off-guard" effect are more obvious on the biddings with a higher default probability if they are inclined to taking risk in stock market.

**THURS  
0450 pm**

6 August 2015

0450pm to 0630pm

Ball Room III

**Session 5.8      Game Theory I**

**Session Chair**    Ehud Lehrer, Tel Aviv University

**T313    Pay to Quit and Team Incentives**

*Pak Hung Au, Nanyang Technological University*

This paper examines the optimal compensation scheme, job design, and severance policy for a team using a model of repeated moral hazard. In the optimal contract, the agent may be paid to quit after a poor performance. We show that a generous severance policy facilitates the adoption of team incentives and team-based production by making it cost-effective to implement peer monitoring and sanction among the agents.

**T324 Cheap Talk with Outside Option: An Experimental Analysis**

*Kaiwen Leong, Nanyang Technological University; Huailu Li, Boston University; Haibo Xu, Fudan University*

Although there is a significant amount of literature investigating various cheap talk models, there is no empirical study that studies the marginal effect of adding an outside option to cheap talk communication. In this paper, we verify the main predictions of Che, Dessein and Kartik's (2013) cheap talk model. First, we investigate how the presence (and size) of the decision maker's outside option affects the amount of pandering by the expert. Additionally, we also investigate the consequences of allowing the decision maker to delegate the choice of projects to the expert; this means that the decision maker can only choose between the outside option and delegation, but is unable to select a project for implementation himself.

**THURS**  
**0450 pm**

**T098 Structural Manipulation in a Multi-period Sender-receiver Game: Never Say Never**

*Hanjoon Michael Jung, The Institute of Economics, Academia Sinica*

This paper shows how an informed politician can manipulate uninformed, yet "rational," citizens in a multi-period sender-receiver game. By examining the payoff structure, the citizens find out that the politician has an incentive to be honest. Hence, they never doubt him and make their decision according to his messages. However, the information structure restricts the citizens' ability to detect his misleading them, and so they cannot punish him properly. Therefore, under this game structure, the politician can mislead them without having significant disadvantages, and hence will manipulate their decision in his favor. This phenomenon is referred to as structural manipulation.

**T487 Two-sided Replacement and Renegotiation-proofness**

*Hee Chun Kim, Washington University in St.Louis*

I study a repeated game with a perfect monitoring and a two-sided replacement of players. Consider a two-player repeated game. At each period, players play two-player prisoner's dilemma game. Before they start each period of the game, players can observe a full history of actions from both sides. At the end of each period, any side of players can be randomly replaced by the player of different type player with a known probability. Players have two different types: the Stackelberg player who is locked into a defective action and the Normal player who can choose both actions. On the while, any sides of players cannot directly observe the replacement and the type of the partner. Moreover, any public signaling device that provides information about both players' type is not allowed. Under this environment, I characterize the threshold equilibrium that players play pure action strategy according to belief about both players' type. I found that the existence of the threshold equilibrium guarantees the existence of the renegotiation-proof equilibrium of Pearce (1989). Such existence of renegotiation-proof equilibrium preserves non-monotonicity of Pearce (1989) and Ray (1994). Moreover, I found that the grim-trigger strategy is supported as a unique (threshold) equilibrium strategy in some cases.

7 August 2015

1045am to 1205pm

Room 831

**Session 6.1      Macroeconomics IV**

**Session Chair**    Charles Yuji Horioka, Asia Growth Research Institute

**F561    [Invited] Evaluating the Effectiveness of China's Financial Reform-The Efficiency of China's Domestic Banks**

*Hsiao Cheng, University of Southern California*

This paper estimates the cost and profit efficiency of Chinese domestic banking sector to evaluate the effectiveness of China's financial reforms since 1978. We use the performance of foreign banks as the benchmark because as possessing superior governing structure and organization, more advanced technologies and better trained labor force. On the other hand, competition in China's banking sector is mainly in the form of nonprice measures, thus putting foreign banks at a disadvantage. We find domestic banks have gradually caught up the cost advantage of foreign banks in a manner consistent with the increased competitive pressure. On the other hand, the profit advantage of domestic banks over foreign banks is widening because of institutional arrangements, cultural and social networks as well as the profit scope and revenue scale economy.

**FRI**  
**1045 am**

**F562 [Invited] A Dynamic General Equilibrium IS-LM Model**

*Takashi Kamihigashi, Kobe University*

We study a simple model that unifies the Ramsey model, Kurz's growth model with wealth effects, and Sidrauski's money-in-the-utility-function model. In a very special case, the dynamics of the model are characterized by two curves that resemble the traditional IS and LM curves. This special case has features such as deflationary spirals and a liquidity trap. Thus our model unifies neoclassical growth theory and IS-LM analysis in a simple manner.



**F247 Capital Misallocation in China: Financial Frictions or Policy Distortions?**

*Guiying Laura Wu, Nanyang Technological University*

Policy distortions and financial frictions are two natural candidates in generating capital misallocation. This paper designs an identification strategy to separate their effects on average MRPK dispersion across firm ownership, as the average treatment effect on the treated and the selection bias from a policy intervention. Using the counterfactual MRPK from a matching procedure, the paper finds 70 percent of the capital misallocation in China can be accounted by policy distortions. Financial frictions cause an aggregate TFP loss of 8.7 percent on the intensive margin. Some popular hypotheses on what drive the policy distortions are tested in the matched samples.

**FRI**  
**1045 am**

**F181 A Fully Funded or Pay-As-You-Go Social Security: In the Case of Aging Small Open Economies**

*Yoshitaka Koda, Chulalongkorn University*

This article studies the effects of different social security systems, fully funded and Pay-As-You-Go (PAYG), on the macroeconomic performance of developed but aging small open economies. Recent developments in medical technology, which affect adult mortality rather than child mortality, have made human longevity endogenous to individuals' allocation of resources. Consequently, the continuous-time overlapping-generations model in this study includes the health maintenance sector in addition to the child education sector. Taking a mandatory retirement age and traits of each social security system into account, individual agents choose their optimal levels of education and health capital investments. The model is calibrated to fit Singapore economy in order to examine the effects of the two social security systems on economic growth and old-age dependency rates quantitatively. The simulation results show that the fully funded system discourages agents to invest too much in their own health hence keeps the country's old-age dependency rate at a relatively low level. Under the PAYG system, which distorts the key family-based choices via two channels of moral hazards, individuals invest lower in education and higher in health than socially optimal levels. Resulting low growth and high old-age dependency rates of the economy make PAYG social security financially unsustainable in the long run.

7 August 2015

1045am to 1205pm

Room 832

**Session 6.2 International Macroeconomics**

**Session Chair** Joseph Dennis Alba, Nanyang Technological University

**F123 On Causality Between Real Exchange Rate – Inflation in Emerging Economies: An Application of Toda-Yamamoto Dynamic Granger Causality Test**

*Mohammed Umar, Federal University Kashere-Nigeria and Universiti Utara Malaysia; Jauhari Dahalan, Universiti Utara Malaysia*

The paper provides further evidence of the real exchange rate and inflation the causal relationship using Toda-Yamamoto (1995) augmented Granger causality test in Malaysia, Nigeria, Philippines and South Africa. The critical values used in this study are simulated based on the leverage bootstrap. The results are compared between the Granger asymptotic chi-square distribution, the modified WALD test statistics and the leverage bootstrapped distribution critical values. Conflicting findings are obtained which prove the existence of size distortion and nuisance parameter estimates when the former method is applied. The results from Toda-Yamamoto test reveal that policy intervention on inflation can stabilize real exchange rate in Malaysia and Nigeria but not vice versa. Moreover, bidirectional causation exists in the Philippines and South Africa meaning that any policy intervention formulated on one variable can stabilize the other. The policy implication of this finding is that the strong price stabilization policy can stabilize real exchange rate fluctuations in all countries under study. Nevertheless, price stabilization can be achieved through effective exchange rate policy in the case of Philippines and South Africa.

**F463 Risk and Return Spillovers among the G10 Currencies**

*Matthew Greenwood-Nimmo, the University of Melbourne; Viet Hoang Nguyen, Melbourne Institute of Applied Economic and Social Research; Barry Rafferty, the University of Melbourne*

We model spillovers among the daily returns and innovations in the option-implied risk-neutral volatility and skewness of the G10 currencies using fifteen years of daily data since the introduction of the Euro. We develop a network representation of the system based on generalized forecast error variance decomposition of an unrestricted vector autoregression. Estimation over rolling windows reveals substantial time-variation in the interaction of risk measures and returns, both within and between individual currencies. Our results reveal that idiosyncratic effects play an important role prior to the global financial and sovereign debt crises. By contrast, systematic effects, represented by greater spillovers, become increasingly dominant during the crises. Skewness spillovers intensify particularly markedly at this time, reflecting greater perceived coordinated crash risks across currencies.

**FRI**  
**1045 am**

**F208 Oil Price Shocks and Macroeconomic Adjustments in Oil-exporting Countries**

*Wee Chian Koh, The Australian National University*

This paper examines the macroeconomic effects of an adverse oil price shock under different exchange rate and fiscal policy arrangements in 40 oil-exporting countries from 1973 to 2010 using panel vector autoregression techniques. The empirical results show that output and government consumption fall in response to an oil price decline. However, the output response is significantly smaller and smoother in countries with flexible exchange rate regimes due to larger immediate real exchange rate depreciation. There is also less need for contractionary fiscal policy as the real depreciation appears to play a sufficient dampening role. In contrast, countries with fixed exchange rate regimes experience a small and delayed real depreciation, leaving fiscal policy to bear the bulk of the macroeconomic adjustments costs. Nevertheless, the presence of oil funds in these countries is associated with reduced fiscal spending cuts and hence a smaller output fall, though the statistical evidence is weak. These findings highlight the shock-absorbing property of flexible exchange rates and the potential macroeconomic stabilization role of oil funds in insulating against adverse oil price movements, making a case for oil exporters to adopt more flexible exchange rate regimes and establish oil funds as fiscal buffers.

#### **F448 Looking at Good and Bad Times around the World**

*Yong Yoon, Chulalongkorn University*

I look at the duration of good and bad times from 1960 to 2006 for 180 countries around the world using duration analysis. Three approaches, nonparametric, parametric and semi-parametric analysis, are used to compare and study the duration of good/bad times in different countries/country groups/regions.

I find that for most countries and groups/regions, good and bad times do not exhibit much difference. Interestingly, however, advanced countries are found to have both longer good times and longer bad times than the rest of the world. Furthermore, in this paper, I also try to explain factors that affect the length of good/bad times than others using policy variables. Expansionary monetary policy is found not to be a significant determinant of duration of good and bad times in most part of the world with the exception of bad times in Africa. And ironically, expansionary monetary policy seems to prolong bad times in Africa, rather than shortening it. The impact of fiscal policy on duration of good/bad times varies across countries and groups/regions shows that expansionary fiscal policy is found to be effective, for example, in South Korea and other East Asian countries, usually associated with longer good times and shorter bad times. Expansionary fiscal policy is related to shorter good times in developing countries. Higher trade openness, on the other hand, has been found to have a positive impact by prolonging good times and shortening bad times; however, in some cases, trade openness has had a negative impact, like in South Korea, by prolonging bad times.

7 August 2015

1045am to 1205pm

Room 833

**Session 6.3 International Trade**

**Session Chair** Augustine Tan, Singapore Management University

**F083 Learning-by-exporting and Performance-related Pay: Evidence from South Korea**

*Youngho Kang, Soongsil University; Sangmoo Lee, Korea Development Institute*

In this paper, we demonstrate that individual performance-related pay (IPRP) promote productivity gains from exporting (i.e., learning-by-exporting [LBE]). This is because when firm participation in exporting activities increases the firm's demand for labor, IPRP enables the firm to hire additional productive workers easily and enhance the motivation of incumbent workers, as suggested by Lazear (2000). Empirical results reveal a large difference between the LBE of new exporting firms with IPRP and that of similar firms without IPRP. Furthermore, to explain such difference, we show that employment effect of new exporting firms with IPRP is larger than that of new exporting firms without IPRP, and the incumbent workers in the new exporting firms with IPRP are likely to be more committed than ones in the new exporting firms without IPRP.

**FRI**  
**1045 am**

**F114 Effects of Exchange Rate Variations on Bilateral Trade with a Vehicle Currency: Evidence from China and Singapore**

*Guangpu Yang, National University of Singapore; Qingyang Gu, National University of Singapore*

With a testable gravity-type bilateral trade model derived from an underlying demand and supply model, we explore the effect of exchange rate variation on bilateral trade in an exchange rate regime with a vehicle currency, which refers to the case where the bilateral trade is invoiced/settled by neither the currency of the home country nor that of the destination country, but by a third currency. The introduction of the vehicle currency makes it feasible to figure out the channels of the variation in the trade volume due to the fluctuation of the bilateral exchange rate in the sense that whether the demand or the supply responds or both. More specifically, in this theoretical framework, appreciation of the import country's currency against the vehicle currency is expected to promote the imports, but the effect of revaluation the export country's currency against the vehicle currency is ambiguous. Moreover, the volatility of the import country's currency against the vehicle currency is also expected to depress the import volume. Empirically speaking, the decomposition of the bilateral exchange rate of two currencies into the bilateral rates of these two currencies to the vehicle currency also provides a new alternative to avoid the econometric problem of potential reversal causality. Through compiling a novel monthly bilateral-trade dataset between China and Singapore over 21 years or 252 months, we provide strong empirical evidence to our model. This paper is also expected to contribute to the literature in several aspects.

**F201 Friends or Rivals? – The Roles of Exchange Rates on Export Competitiveness and the Balances of Trade in Taiwan and South Korea**

*Yu-Li Wang, National Dong Hwa University; Ruei-Shiang Wang, National Dong Hwa University*

This paper adopts Pesaran et al. (2001) bounds testing approach to study how relative exchange rate movements affect export competitiveness and the balances of trade in Taiwan and Korea. Under the ARDL equilibrium correction framework, the impacts of exchange rates can be explored in the long-run, level relationships as well as the short-run, dynamic adjustment processes. The research period starts from the first quarter of 1981 till the second quarter of 2011. The empirical results indicate that real depreciation of the domestic currency improves both countries' total exports and South Korea's trade balances. However, real depreciation of the rival country's currency has different impacts in the long run and the short run. Real depreciation of the South Korean won harms the total exports of Taiwan in the short run, but real depreciation of New Taiwan dollars actually helps South Korean total exports significantly in the long run and the short run. Applying step regression across different time spans to conduct the robust test also supports the above conclusions. Nonetheless, it indicates the changing roles of the exchange rates on Taiwan's and Korea's export competitiveness and international trade.

**FRI**  
**1045 am**

**F322 Does Trade Liberalization Boost Quality Upgrading? Evidence from Indonesian Plant-Product-Level Data**

*Kazunobu Hayakawa, Institute of Developing Economies, Thailand; Toshiyuki Matsuura, Keio University; Sadayuki Takii, Seinan Gakuin University*

In this paper, we examine the effects of tariff reduction on firms' quality upgrading by employing Indonesian plant-product-level panel dataset matched with plant-level dataset. In particular, the effects of reduction in output tariffs and input tariffs are separately explored. We focus on apparel industry. By estimating Berry-type demand function, we derive product quality indicators based on Khandelwal (2010, Review of Economic Studies) methodology, which enable us to isolate changes in prices from quality upgrading. Our findings are as follows. First, the reduction of output tariffs does not affect firms' quality upgrading. Second, that of input tariffs boosts quality upgrading in general. In particular, it is greater particularly in import firms, as is consistent with the fact that the source of such boosting is to import more foreign inputs with high quality.

7 August 2015

1045am to 1205pm

Room 834

**Session 6.4 Health, Education and Welfare III**

**Session Chair** Qiyang Ong, National University of Singapore

**F092 Health and Income Inequality: An Analysis of Public Versus Private Health Expenditure**

*Ayona Bhattacharjee, Indian Institute of Management Bangalore; Jong Kook Shin, Newcastle University Business School; Chetan Subramanian, Indian Institute of Management Bangalore*

This paper examines the link between income inequality and health expenditure under public and private health regimes. We investigate this issue in a two period overlapping generations model in which mortality is endogenous and human capital is the engine of growth. We find that while income inequality always falls under the public regime, this fall could be accompanied by either rising or falling levels of longevity and income growth. The outcome under the public regime is found to depend upon the initial distribution of income and the state of health infrastructure, as proxied by the survival probability. The private regime is characterized by threshold effects and the dynamics of income inequality, longevity and income growth are crucially dependent on the initial distribution of income. Finally, we use panel cointegration techniques to assess the impact of public health expenditure on income inequality.



**F118 Why Are Informal Sectors Reluctant to Join the National Health Insurance in Indonesia?**

*Teguh Dartanto, University of Indonesia; Jahen Fachrul Rezki, University of Indonesia; Usman, University of Indonesia; Chairina Hanum Siregar, University of Indonesia; Hamdan Bintara, University of Indonesia; Wahyu Pramono, University of Indonesia*

The implementation of national health insurance in Indonesia since 2014 brings out the “middle missing” problem in which the non-poor informal sectors remain uncovered from the health care due to self-enrollment. This study aims at examining why informal workers reluctant to join the national health insurance though the benefit packages of program are very generous. Observing 400 households working in informal sectors and applying Triple Bounded Dichotomies Choice Contingent Valuation Method (TCCVM) to observe the Willingness to Pay (WTP), this study found that, around 70% of respondents had the desire to join the health insurance, but their willingness to pay of the premium is lower than the current rate. Our econometric estimations confirmed that the number of family member, sex of household head, access to internet, availability of health facilities and insurance literacy are highly correlated to the likelihood of informal sectors joining the program. Moreover, in contrast to the many studies’ finding, the insurance premium is surprisingly not the main reason for informal sectors to join the program; however, the main obstacle is a lack of insurance literacy. The campaign topic to expand the coverage therefore should be no longer how to register to the program but focus on how to educate the public about the importance of health insurance.

**FRI**  
**1045 am**

**F005 The Impact of Immigrant Peers on Native Students’ Academic Achievement: In Countries Where Parents of Immigrants Are Relatively Skilled**

*Kelvin KC Seah, National University of Singapore*

This study examines how exposure to immigrant students affects the academic achievement of native students in the three largest immigrant-receiving countries – United States, Australia, and Canada. Using a large cross-country dataset, variation in the share of immigrant children between different grade levels within schools is exploited to identify the impact of immigrant peers. I find that exposure to immigrant children has dissimilar effects on native students’ achievements across the three countries. More importantly, I find that institutional factors, such as the way in which countries organize their educational systems, have a crucial bearing on how immigrant students affect their peers.

**F285 Child Labor and Capital Accumulation in Developing Economy**

*Ken-ichiro Ikeshita, Kanazawa University; Hideaki Uchida, Mie University*

In this paper, we examine the inter-generational persistence of child labor and poverty traps, by building a simple overlapping generational model. In particular, we analyze the theoretical relationship among child labor, human capital, and physical capital. In our model, households decide to send their children to the labor market or to school by considering present consumption of the family and their children's educational attainment. The main conclusion of this paper is that if the economy starts from a low level of initial capital stock, it can fall into a poverty trap with lower levels of physical capital and human capital. This result shows that the accumulation of physical capital has a significant impact on child labor and human capital accumulation.

7 August 2015

1045am to 1205pm

Room 835

**Session 6.5 Economic Growth**

**Session Chair** James Ang, Nanyang Technological University

**F069 Cash-in-advance Constraints in a Schumpeterian Growth Model with an Endogenous Market Structure**

*Chienyu Huang, Southwestern University of Economics and Finance; Juin-Jen Chang, Academia Sinica; Lei Ji, SKEMA Business School*

This paper explores the macro effects of monetary policy in a Schumpeterian growth model with endogenous market structure and distinct cash-in-advance (CIA) constraints on consumption, production, and two distinct types of R&D investment – in-house R&D and entry investment. We show that the CIA constraints work through various channels and the effects of monetary policy depend on the strength of each channel. Although inflation seems like a uniform tax imposed on the whole economy, an identical monetary policy can render different distortions of inflation on the economy and give rise to quite different consequences. Specifically, if in-house R&D or quality improvement-type R&D (entry investment or variety expansion-type R&D) is subject to the CIA constraint, raising the nominal interest rate decreases (increases) the firm's market size and economic growth. If either production or consumption is subject to the CIA constraint, growth is immune from money, while the market structure and employment are responsive. Besides, in the presence of various cash constraints our model also generates rich transitional dynamics in response to a change in monetary policy.

**FRI**  
**1045 am**

**F356 Economic Growth, Financial Development, and Income Inequality**

*Donghyun Park, Asian Development Bank; Kwanho Shin, Korea University*

The central objective of our paper is to empirically examine the relationship between financial development and income inequality. Theoretically, there are grounds for both a positive and negative relationship between the two variables. Our main finding is that financial development contributes to lower inequality up to a point, but as financial development proceeds further, it contributes to higher inequality. We also find that when the ratio of primary schooling to total schooling increases and law and order improves, financial development becomes more effective in reducing inequality. Overall, our empirical evidence on the finance-equity nexus is mixed and ambiguous.

**F094 South East Asian Economies: A Quantitative Assessment of Their Potential of Becoming Developed**

*Eu Chye Tan, University Of Malaya; Chor Foon Tang, Universiti Sains Malaysia*

The objective of this paper is to assess the potential of a number of developing South East Asian (SEA) economies, viz. Malaysia, Cambodia, Myanmar, Lao PDR, Vietnam, the Philippines, Thailand and Indonesia to attain a developed country status by benchmarking them with Singapore and South Korea. Both these countries are selected as benchmarks due to their greater cultural affinity and geographical proximity to the SEA economies. It utilizes a novel but simple approach to arrive at some overall development potential index for each country, guided by growth-related theories. It takes an eclectic view that all these theories have at least some policy relevance to these economies. The quantifiable factors determining economic growth and development examined based upon these theories include external trade links, income inequality, physical capital accumulation, human capital, technological progress, organizational efficiency and macroeconomic management. Via the computation of the overall index and other sub-indices, the potential of each of these economies to achieve the status of a developed economy like South Korea or Singapore is established. The areas that require their policy intervention in order to boost their development potential can thus also be identified.

**F434 How Demographic Change Affects Economic Growth?**

*Piyachart Phiromswad, Sasin of Chulalongkorn University*

Several studies examine the relationship between demographic change and economic growth. However, little is known about how does demographic change affects economic growth (i.e. though which channels). This knowledge is crucial for formulating appropriate policies with respect to the imminent aging of the world population. This paper applies the graph-theoretic approach in the spirit of Hoover and Perez (Oxford Bulletin of Economics and Statistics, Vol. 66, pp. 765-798, 2004) to empirically identify channels that demographic change directly and indirectly affects economic growth. This paper uses a quinquennial panel data of 139 economies from 1960 to 1999. This paper finds that demographic change affects economic growth directly and indirectly through several channels.

7 August 2015

1045am to 1205pm

Room 836

**Session 6.6 Environmental Economics I**

**Session Chair** Youngho Chang, Nanyang Technological University

**F151 Emission Permits and Public Pollution Abatement: Can Decentralized Environmental Policies be Efficient?**

*Nikos Tsakiris, University of Ioannina; Panos Hatzipanayotou, Athens University of Economics and Business; Michael Michael, University of Cyprus*

We build a two regions general equilibrium model with cross-border pollution and either international or only inter-regional capital mobility. To control pollution each region uses public pollution abatement and issues either intra-regionally or inter-regionally tradable emission permits. We analyze the non-cooperative (decentralized) and cooperative (centralized) equilibrium level of emission permits and we examine when and how cross-border pollution and the type of capital mobility affect these equilibrium policies. We provide the welfare ranking of the policies in the various cases and we investigate under what conditions the decentralized and centralized equilibrium policies are equally efficient.

**FRI**  
**1045 am**

**F268 Tradable Emission Permits, Capital Mobility and Cross-border Pollution: A Welfare Ranking**

*Nikos Tsakiris, University of Ioannina; Panos Hatzipanayotou, Athens University of Economics and Business; Michael Michael, University of Cyprus*

We construct a general equilibrium model of two regions with cross-border pollution and capital mobility. To control pollution governments issue either intra-regionally or inter-regionally tradable emissions permits. We examine two issues. First, can the non-cooperative and cooperative equilibrium of either intra or inter-regionally tradable emission permits be equally welfare efficient? Second, at Nash equilibrium, which permits regime, and under what conditions, welfare dominates the other? For a comprehensive examination of these issues, we compare the results to when emission taxes control pollution. We highlight the role of capital mobility and cross-border pollution in all three policy regimes.

**F488 On the Complementarity of Pollution and Population Control under Economic Growth**

*Maria Kamran, The University of Queensland; Stuart McDonald, The Renmin University of China*

This paper investigates the impact of population controls and market based environmental policy instruments on economic growth. The paper shows that without population controls, when agents' lifespan is finite, the introduction of an emissions permit scheme creates a demographic crisis, where the population jumps to a higher steady state. We find that improvements in abatement technology are important in determining the effectiveness of population control methods. Birth taxes, when combined with subsidies and transfers, have a positive effect on income and education investment when abatement technology is improving. However, when abatement technology remains fixed, birth limits prove to be only effective method of preventing the demographic crisis, despite having a regressive effect on household income.

**F374 Managerial Environmental Incentives under Emissions Tax**

*Soo Keong Yong, Xi'an Jiaotong-Liverpool University*

This paper introduces an explicit pollution abatement incentive into a managerial wage model under an emissions tax regime. We show that, when compared to a standard wage contract in Cournot equilibrium, each manager exerts higher abatement effort that allows for higher production under the abatement incentivized contract. As a consequence, the government sets a low emissions tax rate. The firms' owners benefit from the higher profit and the social welfare is also higher in the new wage contract relative to the standard wage contract. The optimal outcome depends on successful coordination between the government and the firms that work through credible signals between the two parties or simply organize as a joint public-private partnership scheme to address the problem of climate change.

7 August 2015

1045am to 1205pm

Room 837

**Session 6.7 Capital Flows and Exchange Rate II**

**Session Chair** Stephen Grenville, Lowy Institute for International Policy

**F106 Effects of Exit Strategy of the Quantitative Easy Monetary Policy on East Asian Currencies**

*Eiji Ogawa, Hitotsubashi University; Zhiqian Wang, Hitotsubashi University*

The FRB decided to finish its quantitative easy monetary policy as the global financial crisis is subsiding in the United States. It is expected that it will raise the FF rate from almost zero percentage in the near future. Abundant money which flowed from the United States into emerging market countries is beginning to flow backward to it. As a result, the emerging market countries are beginning to face depreciation of their home currencies and drops in stock prices. Basing on the situation in global economy, we consider effects of changes in the monetary policy, especially effects of rising the in the interest rates in the United States on East Asian currencies in this paper. Specifically, we use data on interest rates as a monetary policy instrument to investigate how changes in the interest rates and interest differentials affect interest rates, exchange rates, and capital flows in the East Asian emerging market countries.

**FRI**  
**1045 am**

**F249 Remittances And Economic Growth In ASEAN**

*Sutida Plyngam, Srinakharinwirot University*

This paper studies the relationship between remittances and economic growth in six main origin countries of international migrant workers in ASEAN – Thailand, the Philippines, Indonesia, Malaysia, Cambodia, and Laos. As a huge flow of international migrants, workers' remittances have become one of main sources of financial inflow to these least developed countries in the region. We apply an Autoregressive distributed lag (ARDL) cointegration analysis in this study by using the time series data over 30 years (1983 – 2013) from the World Development Indicator of the World Bank. Our empirical results indicate only a long-run causal relationship in Indonesia, while there are no relationship between remittances and economic growth in the Philippines, Thailand, Malaysia, Laos, and Cambodia. Finally, overall results suggest that the remittances do not encourage growth in these five countries.

**F283 The Determinants Behind the Intensity of Capital Flow Surges and Reversals**

*Chiratus Ratanamaneichat, Kasem Bundit University; Samuel M. Schreyer, Fort Hays State University; Shao Ruo, Shenyang Normal University*

We investigate the determinants of the intensity of capital flow surges and reversals for a set of Asian economies using a quantile regression framework. To our knowledge, this methodology has not been applied in the extant literature. Previous studies have generally investigated the determinants of capital flow reversals and surges by employing a logit framework to explain the occurrence of such episodes. In sharp contrast, quantile regression allows us to examine the effects of the determinants across the entire distribution of capital flows, including the tails which are associated with surges and reversals. There are two major benefits of applying quantile regression in this manner: (1) estimates are of the effects that determinants have on the magnitude—as opposed to the occurrence—of capital flow surges and reversals; and (2) estimates do not rely on the subjective identification of when surges and reversals occur. Tentative results indicate substantial nonlinearities. Capital flows respond monotonically to several determinants, while other determinants have only a statistically significant at the highest/lowest conditional quantiles. These findings shed light on why the literature has at times found conflicting evidence on the factors precipitating capital flow surges and reversals.

**F070 Finding Stability in a Time of Crisis: Lessons of East Asia For Eastern Europe**

*Paul McNelis, Fordham University*

This paper examines the options of small open economies of in Eastern Europe pegged to the Euro, in a time of crisis. Specifically, should Bosnia and Herzegovina, Bulgaria, Latvia and Lithuania move to full Euro area accession, as Estonia, Slovakia, and Slovenia have done, or follow the examples of Poland, the Czech Republic, and Hungary? This paper argues that going forward to full monetary union offers benefits over a pure fixed exchange-rate regime. The experience of Hong Kong at the time of the Asian crisis in the late 1990's illustrates the benefits of monetary union during a time of crisis.



7 August 2015

1045am to 1205pm

Ball Room III

**Session 6.8 Prices, Business, Fluctuations and Cycles**

**Session Chair** Joergen Moeller, Institute of Southeast Asian Studies (ISEAS), Singapore

**F495 Vertical Intra-industry Trade and Correlation of Business Cycles in East Asia**

*Jingjing Meng, Waseda University*

This paper focuses on sustained trade integration and its impact on correlation of business cycles in East Asia. Using threshold method to separate vertical intra-industry trade from horizontal intra-industry trade, empirical analysis shows that the sharp rise of vertical intra-industry trade in the region from the 1990s until the recent global financial crisis strengthened the correlation of business cycles because it increased total intra-industry trade in total trade (not because it increased the share of vertical intra-industry trade in intra-industry trade). The recent global financial crisis strongly affected the region. The average share of vertical intra-industry trade and intra-industry trade in total trade declined; the crisis brought a temporary halt to the period of increasingly synchronizing business cycles in East Asia from 2003 to 2007.

**FRI**  
**1045 am**

**F352 Bank Monitoring Dynamics and Inefficiency over the Business Cycle**

*Vishrut Rana, Singapore Management University*

How does bank monitoring evolve over the business cycle? The model presented in this paper features financial intermediaries who engage in risk-shifting over the business cycle by reducing monitoring activity during business cycle upturns when the chances of loan losses are lower. The model environment features firm-specific productivity shocks with endogenous default thresholds. Bank monitoring is costly, but it can indirectly reduce loan default probabilities by preventing firm moral hazard. As aggregate default probabilities fall over the business cycle, the marginal benefit of loan monitoring drops. In addition, intermediary monitoring is inefficiently low because firms holdup part of the benefit of monitoring.

**F082 Do Credit Market Imperfections Justify a Central Bank's Response to Asset Price Fluctuations?**

*Kengo Nutahara, Senshu University and the Canon Institute for Global Studies*

Do credit market imperfections justify a central bank's response to asset price fluctuations? This study addresses this question from the perspective of equilibrium determinacy. In the model we use, prices are sticky and the working capital of firms is subject to asset values because of a lack of commitment. If credit market imperfections exist to a small degree, the Taylor principle is a necessary and sufficient condition for equilibrium determinacy, and monetary policy response to asset price fluctuations is good from the perspective of equilibrium determinacy. However, if credit market imperfections exist to a large degree such that the collateral constraint is binding, then the Taylor principle no longer guarantees equilibrium determinacy, and monetary policy response to asset price fluctuations becomes a source of equilibrium indeterminacy. We find that the existence of credit market imperfections makes it unsuitable to initiate a monetary policy response to deal with asset price fluctuations. We also find that reductions in credit market imperfections can enlarge the indeterminacy region of the model parameters.

**F246 Multilateral and Bilateral Multi-country Models: Differences in Spillover Estimates?**

*Georgios Georgiadis, European Central Bank*

Yes. Spillover estimates obtained from easy-to-implement bilateral (such as two-country VAR) models are less accurate than those obtained from technically more demanding multilateral (such as global VAR) models. In particular, the accuracy of spillover estimates obtained from bilateral models depends on two aspects of economies' integration with the rest of the world. First, accuracy deteriorates as direct bilateral transmission channels become less important, for example when the spillover-sending economy accounts only for a small share of the spillover-receiving economy's overall integration with the rest of the world. Second, accuracy worsens as indirect higher-order spillovers and spillbacks become more important, for example when the spillover-receiving economy is strongly integrated with the rest of the world overall. Empirical evidence on the global output spillovers from US monetary policy is consistent with these general results: Estimates of the spillovers obtained from two-country VAR models are systematically smaller than those obtained from a global VAR model; and the differences in spillover estimates between the two-country VAR models and the global VAR model are more pronounced for economies for which the US accounts for a smaller share of their overall trade and financial integration with the rest of the world and which are more integrated with the rest of the world overall.

**FRI**  
**1045 am**

7 August 2015

0130pm to 0250pm

Room 831

**Session 7.1      Natural Resources and Energy Economics**

**Session Chair**    Renate Schubert, ETH Zurich

**F013    A Real Options Model Using Binomial Decisions Tree Analysis to Value a Mining Investment Decision in the Asia-Pacific Region**

*Nam Foo, Curtin University*

Mining involves discovering, extracting and processing of non-renewable resources as an input for energy production. The potential of mining revenues to contribute to national economic development is well known, but the allocation of mineral wealth and the concern of increasing resource scarcity have become issues of debate in the mining industry. The purpose of this study is to introduce the binomial decision tree analysis, which is a new approach to investigating the relationship of mining investment decisions in a situation where the investment is irreversible and resulting from a tax policy change. The study documented in this paper reveals findings about options for the investor that suggest it is sometime better to wait for a more suitable time to invest and, having such knowledge, provides the potential to change the investment climate in mining.

**F046    Is Foreign Direct Investment in China's Iron Ore Mining Sector Productive?**

Sajid Anwar, University of the Sunshine Coast; Sizhong Sun, James Cook University

China's 12th 5-year plan aims to transform the country into an innovation based society. In order to achieve this aim, there has been a substantial increase in China's research and development (R&D) spending over the years. At the same time, the Chinese government is adopting a more targeted foreign direct investment (FDI) policy. This paper aims to evaluate the effectiveness of R&D and FDI policies in China's iron ore mining industry, which has not been the subject of thorough investigation. Using a recently developed coarsened exact matching technique, we find that domestic firms in China's iron ore industry that conduct R&D are on average 0.3937% more productive and their sales are 0.0253% higher. While this industry attracts less than 1% of China's inward FDI, foreign investment has a positive and sizable impact on both productivity and profitability of domestic firms in China's iron ore mining industry. Foreign investment in China's iron ore mining industry offers attractive returns to foreign investors.

**F355 Economic Activity, Energy Structures, and Carbon Emissions in the Asia-Pacific Region: Drivers and Trends**

*Di Yin, Nanyang Technological University; Youngho Chang, Nanyang Technological University*

This study aims to investigate how economic activity and energy structures affect the carbon emissions of 15 major countries in the Asia-Pacific region from 1990 to 2010 using the Index Decomposition Analysis (IDA) approach. The identification of key drivers and trends of carbon dioxide emissions at the regional level would help develop the appropriate policy facilitating the reduction of carbon emissions. This study identifies four effects: activity effect, structural effect, intensity effect, and energy mix effect. The activity effect calculates the impact of economic growth on the carbon emissions while the structural effect quantifies the contribution of economic structure adjustment to the carbon emissions. The intensity effect measures how the improvement of energy efficiency affects the level of carbon emissions while the energy mix effect examines how the change of energy structure influences the level of carbon emissions. The analysis at the country level identifies the energy-related carbon emissions patterns in different countries within the region and activity effect and intensity effect appear to be the dominant factors. The analysis at the region level is conducted from the temporal IDA and the spatial IDA approach. The former shows the contributions of four effects to the carbon emissions over a long time span, while the latter explains the differences of the energy-related carbon emissions patterns between a specific country and the average level in the region. The results show the unbalanced carbon emissions among different countries and the convergent trends in the whole region.

**FRI**  
**0130 pm**

**F478 From Natural Resource Boom to Sustainable Economic Growth:  
Lessons for Mongolia**

*Pranav Gupta, International Monetary Fund; Bin Grace Li, International  
Monetary Fund; Jiangyan Yu, International Monetary Fund*

Some resource-rich developing countries are in the process of harnessing immense mining resources towards inclusive growth and prosperity. Nevertheless, tapping into natural resources could be challenging given the large front-loaded investment, volatile capital flows and exposure to global commodity markets. Public investment is needed to remove the often-large infrastructure gap and unlock the economic potential. However, too rapid fiscal outlays could push the economy to its limit of absorptive capacity and increase macro-financial vulnerabilities. This paper utilizes a structural model-based approach to analyze macroeconomic impacts of different public investment strategies on key fiscal and non-fiscal variables such as debt, consumption, sovereign wealth fund, and real exchange rates. We apply the model to Mongolia and draw policy recommendations from the analysis. We find that fiscal policy adjustment, particularly moderating infrastructure investment and optimizing investment efficiency is needed to maintain macroeconomic and external stability, as well as to boost the long-term sustainable growth for Mongolia.

7 August 2015

0130pm to 0250pm

Room 832

**Session 7.2 Industrial Economics**

**Session Chair** Pak Hung Au, Nanyang Technological University

**F024 Competition among the Big and the Small with Different Product Substitution**

*Lijun Pan, Nagoya University; Makoto Hanazono, Nagoya University*

This paper employs a linear monopolistic competition model to revisit the impacts of the large firm's entry in the context of a mixed market structure where large and small firms coexist. In our model, the large firm determines both the range of product varieties and the quantity of each variety while the small firm produces only one variety of output and freely enters the market. We argue that the different substitutabilities between the products of large firms and those of small firms play a critical role in determining the impacts exerted by the entry of the large firm. Specifically, if the products of large firms and those of small firms have the same substitutability, the entry of the large firm has no impact on the incumbent large firms' variety choice, output of each variety or prices. If the products of large firms and those of small firms have different substitutabilities, however, the entry of the large firm may cause a rise or a fall of the incumbent large firms' output, price and profit, depending on the comparison of the substitutability within large firms and small firms and the substitutability across these two types of firms. In particular, the entry of the large firm may reduce the profits of incumbent large firms and social welfare. Our welfare analysis implies that it may be reasonable for the government to conduct the regulation against the entry of large firms in local markets.

**FRI**  
**0130 pm**

**F504 Production and Hedging Decisions under Regret**

*Xu Guo, Nanjing University of Aeronautics and Astronautics; Wing-Keung Wong and Xuehu Zhu, Hong Kong Baptist University*

In this paper, we investigate regret-averse firms' production and hedging behaviors. We first show that the separation theorem is still alive in regret aversion by proving that regret aversion is independent of the level of optimal production. We then show that the full-hedging theorem does not always hold under regret aversion as we find that regret-averse firms take different hedged positions from risk-averse firms in some situations. We also derive that regret-averse firms often take a smaller optimal hedging position than risk-averse firms, except when the futures price is considerably biased upwards. We also find that with more regret aversion, regret-averse firms will hold smaller optimal hedging in an unbiased futures market but could hold a higher or lower optimal hedging in a biased futures market. Furthermore, contrary to the conventional expectations, we show that banning firms from forward trading may induce regret-averse firms to produce more or less. By highlighting the unique behaviors in regret-averse firms, our model may help firms to manage their production levels and hedging positions, and aid different stakeholders and investors in their investment decisions and policy makings.

**F411 Patent Competition with Licensing**

*Rong Ding, National University of Singapore; Chiu Yu Ko, National University of Singapore*

We examine licensing in a patent competition for a cost-reducing innovation among firms competing in a product market. For a licensing auction, licensing is welfare improving for large innovations but welfare reducing for small innovations. Moreover, if the licensor has an option to exit the market, a larger magnitude of innovation is needed for the licensing to be welfare improving. Furthermore, with more firms in the market, the set of innovations leading to a welfare improving licensing expands. However, for a royalty licensing, licensing has no impact on social welfare regardless of whether licensor has an option to exit the market.



**F274 The Smile Curve: Evolving Sources of Value Added in Manufacturing**

*Richard Baldwin, Graduate Institute of International Studies ; Tadashi Ito, Graduate Institute of International Studies*

The geographical fragmentation of production processes is accompanied by the displacement of value added from high-technology-high-wage nations to low-technology-low-wage nations. However, developing nations are worried that they are getting the wrong sorts of jobs. This concern is often organized around an intellectual concept – the so-called ‘smile curve’, which asserts that the share of value added in manufactured products is shifting from the fabrication stages to pre- and post-fabrication services. The general assertion held among developing nation policy makers is that this distribution is moving against fabrication stages, and thus they are getting the ‘bad’ jobs, i.e. jobs associated with low value added per worker, while the ‘good’ jobs stay in the North.

The goal of this paper is to shed light on how important the smile-curve notion is at economy level, in order to obtain some answers to the above-mentioned economy-wide policy issues/concerns. Using JETRO-IDE’s Asian Input-Output table, we find evidence of the ‘smile curve’. Namely, for almost all exporting sectors/nations the value-added input share has drastically shifted from manufacturing to service inputs. We also find that the share of service input coming from rich nations and China has risen substantially in the exports of the developing countries, a supportive evidence for the developing countries’ concern.

**FRI**  
**0130 pm**

**Session 7.3 Welfare and Happiness Economics II****Session Chair** Giorgio Dominese, Transition Studies Research Network**F291 [Invited] Intellectual Capital Evaluation for a “New Deal” in Welfare Policies and Management***Andrea Garlatti, University of Udine, CIWE; Giorgio Dominese, Transition Studies Research Network and Transition Academia Press, Venice; Stefano Miani, University of Udine, OSSFI*

Literature often argues that public sector organizations face greater pressures for representativeness, accountability and responsiveness than private sector firms (Jain and Jeppesen, 2013). However, as De Angelis and Trindada (2013) state the public sector is influenced by a growing need for “competition, performance standards, monitoring, measurement, flexibility, emphasis on results, customer focus and social control.” Accordingly, public sector organizations should not import managerial tools from private companies ignoring the public sector context. Within emerging managerial tools, Intellectual Capital, (IC) offers an interesting perspective to analyze both public and private organizations (Dumay, 2014). Indeed, to resolve some of the limitations of traditional financial reporting, literature developed models to identify, measure and report IC. Interestingly, research on IC within the public sector in general and within health care organizations, in particular, seems to be fragmented and not well connected (Garlatti et al., 2014). Several reasons make IC within hospitals an emerging topic. First, health care organizations are knowledge-intensive organizations, and the study of their intangibles seems to be appropriate. Second, the development of an austerity period pushes public organizations to face financial resource constraints that must be compensated by non-financial resource improvements to keep service quality and sustainability. Third, the growing pressure of transparency and performance measurement within the public sector pushes the need to develop integrated reporting tools. This paper aims to investigate the topic of IC measurement within a public health care organization. More precisely a case study is used to support the role of IC in healthcare. The selected case study is facing a transition situation due to the change in the planning and control approach used to fund public hospitals. Problems connected to the traditional system and the innovative one based on Activity Based Funding (ABF) approach are discussed. The role of IC is highlighted as a connecting tool that could reduce risks derived from the application of the new ABF system. Therefore, using a case study approach, the paper is developed to draw some insights on the risk and opportunities of implementing an IC approach within a healthcare organization.

**F168 Happiness and Life Satisfaction: A Comparison Study Between Malaysia and Singapore**

*Mei Chin Boo, Kolej Universiti Tunku Abdul Rahman; Siew Hwa Yen, Universiti Sains Malaysia; Hock Eam Lim, Universiti Utara Malaysia*

Gross Domestic Product (GDP) has long been an indicator for economic growth. There is an on-going debate whether high growth increases well-being. The terms “happiness” and “life satisfaction” are often used interchangeably to explain subjective well-being levels of individuals. Our paper compares to what extent income and other income related factors could influence happiness and life satisfaction in Malaysia and Singapore. The models were estimated using ordered logistic regression based on the 6th waves of World Value Survey (2010-2014) data for both nations. The outcomes indicated that the scale of income has high impact on happiness and life satisfaction in both nations which support Easterlin paradox partially, indicating a positive association between happiness and income in the short-term. In both countries, other income related factors that have positive and strong significant impact on happiness and life satisfaction are health status, employment and satisfaction on financial situation of household. For both Malaysians and Singaporeans, happiness greatly depends on good health; whereas life satisfaction depends more on household financial situation. Age and gender have significant impacts on happiness amongst Singaporeans but such relationships were not shown in the Malaysian model. Singaporean females are happier and more satisfied with life compared to their counterparts. Marital status does not contribute to happiness or life satisfaction in Singapore but in Malaysia, those whom are married or divorced/widowed/separated seem to be more satisfied with life compared to the singles. The Malays are more satisfied with life in Malaysia but in Singapore, ethnicity does not have any impact on happiness or life satisfaction.

**FRI**  
**0130 pm**

**F321 An Exploratory Study on Developing a Natural Resource into a Wellness Spa**

*Gladys M. Navarro, Saint Louis University, Philippines; Christine P. Manipon, Saint Louis University, Philippines; John Paul B. Villanueva, Saint Louis University, Philippines; Eleanor P. Garoy, Saint Louis University, Philippines*

Developing a natural resource into a wellness spa can be a significant potential revenue source for a certain locality. Since common resource goods are non-excludable and rival goods, they are also subjected to exploitation. In the occurrence then of a market failure, government intervention is needed. To ensure sustainability and profitability, contingent valuation approach was used during the survey and WTP as the measure of value. Three generations were considered – the youth, the working class, and the retirees. Results showed that the retirees have a very low WTP for a wellness spa, whereas, the youth exhibited the highest WTP. A difference was also seen between the youth and the working class, with respect to the elasticity of demand of the good. While the working class' demand for the product is elastic, the youth's demand elasticity on the other hand is elastic. Results also showed that developing the natural resource, would allow Local Government Unit to potentially generate higher revenues from packages offered in the wellness spa, aside from the use of the natural resource alone, at the same time, protecting it and making it more sustainable.

**F308 Does Altruism depend on Gender and Marital Status: Evidence from a Structural Model of Transfers to Parents from their Adult Children in South Korea**

*John C. Ham, National University of Singapore; Heonjae Song, University of Seoul*

Altruism plays an important role in many economic models, and a major question is whether it differs by gender. For example, Behrman and Rosenzweig look at a model where bargaining (within a collective framework) determines the transfer of time from adult couples to their parents in the US; transfers to parents are an attractive area for examining bargaining power since it is plausible (and supported by data) that the wife cares more for her parents than her husband's parents and vice-versa. However, to identify their model they must assume that men and women have equal altruism parameters. On the other hand, Ham and Song (2014) estimate a structural model where bargaining (within a collective framework) determine of monetary transfers from South Korean (SK) couples to their parents (and vice-versa); they allow husbands and wives to have different altruism parameters by using experimental evidence of the effect of gender for SK college students on altruism. In other words they solve the identification problem by using additional data.

In this paper we use a different type of additional data allow for gender differences in altruism in our structural bargaining model. Specifically we now incorporate monetary transfers from single, as well as married, children to their parents to identify the model. Adding single individuals to the analysis allows us to specify and estimate altruism parameters that depend on both gender and marital status. In our modeling we allow for the fact that a significant portion of parents receive zero transfers (as in previous work), and the fact that the equation describing the contribution to one set of parents depends on whether the couple is also giving to the other set of parents (unlike in previous work). We find that one's altruism toward his or her parents is a function of their age for both men and women, but is a function of marital status only for men. Controlling for marital status, we find that men and women exhibit same degree of altruism. Finally, our results suggest that holding demographic characteristics constant, the husband and wife have equal bargaining power when determining transfers to the parents.

**FRI**  
**0130 pm**

7 August 2015

0130pm to 0250pm

Room 834

**Session 7.4      Macroeconomics V**

**Session Chair**    Jonathan Batten, Monash University

**F287    The Welfare Economics of Austerity in Open Economies**

*Kim-Heng Tan, Nanyang Technological University*

The Eurozone has been engulfed by a public-debt crisis and has resorted to austerity measures by cutting down on public debt. It would seem from the work of Diamond (1965) that, since public debt imposes a burden in the long run, cutting down on public debt would improve welfare in the long run. Cutting public debt improves welfare by increasing intertemporal efficiency in the sense of Phelps (1961, 1965) and lowering taxes in the long run. However, Diamond's work is confined to a closed economy. It is well known from the work of Persson (1985) that a large open economy need not necessarily improve its welfare in the long run by unilaterally cutting its public debt. This is because, for a large open economy, the interest income on external assets falls in response to the fall in the world interest rate when public debt is cut. If the large open economy is a net creditor to the rest of the world, cutting down on public debt will lower the interest income on its external assets. Although cutting public debt improves welfare by raising intertemporal efficiency and lowering taxes in the long run, the loss of interest income on external assets for a net creditor nation implies that overall welfare will change ambiguously. What policy options then do the Eurozone countries have if they are concerned with achieving long-run welfare improvement given their huge public debt? These considerations provide the motivation in this paper to study the welfare economics of austerity in open economies.

In studying the welfare economics of austerity in open economies, we show that the international coordination of austerity, whether unaccompanied or accompanied by foreign aid, is Pareto improving under certain conditions. Whether the international coordination of austerity should be accompanied by foreign aid or not depends on whether the richer-donor nations of foreign aid to the poorer-recipient nations are net external creditors or debtors. If they are net external creditors, relying on two policy instruments, namely, the international coordination of austerity and foreign aid, is no better than relying on the single policy instrument of the international coordination of austerity. However, if the richer-donor countries are net debtors, then there is a case for relying on the two policy instruments to enhance the welfare benefits of austerity in the long run.

### **F345 Does Financial Integration Accelerate FDI and Spur Growth**

*Ahmed M. Khalid, Bond University and Lahore University of Management Sciences*

The relationship between FDI and growth is one of the most intensively researched issues in international economics. There is a fair amount of evidence suggesting that there exists a positive relationship between these two. However, Gao (2005) argues that the alleged link between FDI and growth is rather the consequence of both FDI and growth responding endogenously to economic integration. This study adds to this debate by using a variety of economic integration indexes. A simultaneous equation model is developed based on the three important variables under study. We use three different index of integration. We first develop an index for financial integration to test the above stated relation and the role of financial integration in FDI and growth. Alternatively, we use Chinn-Ito index of financial integration and KOP index of globalization to test the same. A number of control variables are also used in the estimation to capture the effects of some important macroeconomic variables. A large panel of above 100 emerging and developing economies over the period 1990-2010 is used in this study. For empirical estimation, we use two alternative estimation procedures. First, instrumental variable (IV) method is used with both fixed and random effects. Later, GMM technique is used for robustness purposes. To further incorporate the dynamics in the model, we use panel VAR to observe the short- and long-run relations. The initial results confirm that it is not FDI as such but economic integration in any form or shape that determines growth. These results suggest that the current frenzy of countries from all income brackets to attract FDI as a way to improve their growth prospects, might be misplaced. What countries that want to grow faster should do is to become ever more integrated with the world economy. The actual mode of integration, whether through trade, FDI or else, seems not to matter. The extended model with Chinn-Ito index and KOF index along with alternative estimation techniques (GMM and Panel VAR) is being estimated. These changes could alter the initial results.

**FRI**  
**0130 pm**

**F144 Commodity Market Performance during the Quantitative Easing Times**

*Bernard Morard, University of Geneva; Florentina Olivia Balu, University of Geneva*

In recent times, many central banks moved to quantitative easing (QE) programs to stimulate the economic recovery after the financial crisis of 2007-2008. In this context, there are well-known the QE actions of advanced countries' central banks: Federal Reserve, Bank of England, European Central Bank, Bank of Japan, Swedish National Bank. Their expansionary monetary policy measures (pushing short-term interest rates near zero, by purchasing government securities) come to increase the market liquidity, in order to stimulate the aggregate demand, and implicitly the economic recovery. But, these kinds of measures have had many implications on different components of economic system: capital market, commodity market, real estate market, savings and pensions, capital flows and so on. Our paper focused on the impact of QE programs on commodity market performance, knowing that, the QE actions push up prices, generally. We assess the spillover effects of the US QE programs (US Q1, Q2 and QE3) using a factor augmented vector autoregressive model (FAVAR Model). Contrary to expectations, our research proved that not all QE programs pushed up the commodity prices, and affected seriously the market performance, sometimes. CRB commodity index evolution comes to support our results.

**F489 The Impact of Public Investment on Private Investment: Evidence from India**

*Pradyumna Dash, Indian Institute of Management Raipur, India*

This paper estimates the impact of public investment on private investment in India during 1970 to 2013 using ARDL procedure developed by Pesaran and Shin (1999) and Pesaran and et al (2001). It finds that a 1% increase in public investment as a ratio to GDP leads to a 0.85% and 0.64% decrease in private investment as a ratio to GDP in long-run and short-run, respectively, controlling for economic conditions. It also finds that the crowding out effect of public investment on private investment is dampened in post liberalization period. We also find that a "market friendly" incumbent and an increase in foreign direct investment dampen the magnitude of the crowding out effect of public investment. We investigate other possible explanations and find evidence supporting the hypothesis that public investment crowds out private investment in India.



7 August 2015

0130pm to 0250pm

Room 835

**Session 7.5 Nonmarket Valuation**

**Session Chair** Wai Mun Chia, Nanyang Technological University

**F169 The Value of Statistical Life: Results from the Thai Labor Market**

*Touchanun Komonpaisarn, Chulalongkorn University*

One important element in the evaluation of any public project that involves life-saving is the concrete valuation of human life. One proposed method to calculate that value using the concept of optimization is to identify the different labor market outcomes among individuals who face different death risks. This analysis includes the most comprehensive set of wage and non-wage compensation package in the estimation, employing 7 years of cross-sectional datasets that investigate the market outcomes and various characteristics of workers and their workplaces in Thailand together with the information regarding industry/occupation-specific death and injury rates from the Social Security Office of Thailand. The findings could be considered the very first estimates of a Thai's value of life using a well-established labor economic theory. The value of statistical life (VSL) of a Thai individual is estimated to be between \$4-5 million (2009 \$). This paper also allows the VSL estimates to vary across different groups of people. All the estimates obtained are much higher than those found using the human capital or contingent valuation approach.

**FRI**  
**0130 pm**

**F325 Valuing the Hidden Economic Contribution of Women in Small-scale Mining: Empirical Analysis of the Backward-bending Supply Curve**  
*Eleanor P. Garoy, Saint Louis University; Gladys M. Navarro, Saint Louis University; Christine P. Manipon, Saint Louis University*

In developing countries, informal labor markets continue to thrive as important source of earnings. Where sources of income from labor market may prove uncertain, households easily rely on informal labor markets. In Benguet, cultural traces of small-scale mining activities are very visible. Informal small-scale mining activities are prominent sources of earnings, where, interestingly, participation of women is highly observable. What motivates women to participate in small-scale mining? This paper investigates the at-work (small-scale mining activities) allocation of time among women miners in Benguet (involving 2 small-scale mining municipalities). Following Becker's model of time allocation, a labor-leisure model was used analyze women behavior and decisions on time allocation between work and leisure. The model was expanded to construct the labor supply of women miners. Theoretical predictions indicate that labor supply in poor or subsistent economies will eventually become backward bending. We focus on the impact of women characteristics on this time allocation. Employing different functional forms, we find in general that women characteristics of age, civil status, education, family size, and number of nuclear family within the household affect the percentage of time devoted to small-scale mining activities. Empirical results also show that, in some small-scale mining activities, hours work tends to lie on the backward-bending portion of the labor supply curve. Further, the findings reveal that devotion of time by women on small-scale mining activities is less sensitive to the price of gold. Similarly, labor supply is considered less sensitive and inferior.

**F048 Assessment on Valuation of Ecosystem Functions and Services  
Provided by Mangrove Ecosystems in Malaysia**  
*Chiam Chooi Chea, Open University Malaysia*

There are a large number of studies on the value of non-market mangrove forest benefits. This paper is a theoretical paper that focuses on the functions and values of mangrove ecosystems in Malaysia, which comprises 45 past studies conducted in Malaysia. This paper aims to highlight the issues of future problems gaps pertaining to mangrove ecosystems in Malaysia. The results of the report found out that there are relatively few studies attempted to calculate the net economic value of the mangrove forest products and also there are few studies on the study of benefit transfer on mangrove forest in Malaysia. Other than that, economic values at landscape, species, climate change, pollution and genetic level are still lacking and the application of advanced models are still lacking. Plus, most studies are conducted in the Peninsular Malaysia and few are conducted in Sabah and Sarawak of Malaysia.

**FRI**  
**0130 pm**

**F304 Hedonic Price Indexes for High Tech Products**

*Iqbal A. Syed, University of New South Wales*

Different approaches of hedonic regression methods---the time-dummy (TD), the single imputation (SI) and the double imputation (DI) methods---are prone to omitted variable bias because many of the prices determining characteristics are typically unobserved. This study shows that while the DI method may produce consistent price relatives for new and disappearing goods in the presence of unobserved characteristics, no such possibility exist in the TD and SI methods. Furthermore, the study finds that in the cases where the DI method fails to attain consistency, the magnitude of the DI bias is unambiguously lower than the SI bias. The results of this study have implications for application because the DI method is used the least by the practitioners for the purpose of constructing quality adjusted price indexes.

7 August 2015

0130pm to 0250pm

Room 836

**Session 7.6 Health Education and Welfare IV**

**Session Chair** Margaret Triyana, Nanyang Technological University

**F115 Parents, Migrant Domestic Workers and Children's Speaking of a Second Language: Evidence from Hong Kong**

*Sam Hak Kan Tang, The University of Western Australia*

This paper explores the effects of different language home environments provided by English-speaking and non-English-speaking migrant domestic workers (MDWs) on Hong Kong children's ability to speak English. To isolate MDWs' language effect from parental and family effects, I use between-siblings comparisons and an empirical model of language acquisition. Results from between-siblings comparisons reveal a clear sign for the positive language effect of English-speaking MDWs. Estimates of the language acquisition model show that a child who is cared for by an English-speaking MDW and who has a bilingual mother is 45 percent more likely to speak English.

**F303 The Importance of Timing in Education Intervention Program Reforms in Indonesia: A quasi-experimental approach**

*Elan Satriawan, Gajah Mada University; Rizal Adi Prima, TNP2K; Wisnu Setiadi Nugroho, Gajah Mada University*

This paper analyzes enrollment, attendance and dropout effect estimates following the reforms in Cash transfer for Students (Beasiswa Siswa Miskin) program in Indonesia. More specifically our model investigates the effect of anticipated cash transfer to enrollment decision in secondary school. This study utilizes a unique panel data of poor children who were transitioning from primary school to Secondary schooling in 2013. By using variation in timing of receiving Social protection/BSM card we tried to isolate the impact having a SP card to school enrollment. The identification was then refined using both logistical analysis and matching techniques and our finding show that receiving social protection card and/or BSM card prior to school registration period ends has increased the likelihood of poor students to be enrolled at the junior high school by 6.6 percent. Further robustness check affirms that heterogeneity in results are negligible and relatively consistent with the main model being observed.

**FRI**  
**0130 pm**

**F207 The Contribution of Western Fast Food to the Fast Growing Obesity in China**

*Meliyanni Johar, University of Technology Sydney; Shiko Maruyama, University of Technology Sydney; Jeffrey Truong, University of Technology Sydney*

It is widely believed that fast foods make us fat. The westernization of many Asian countries has led to the rapid expansion of Western-style fast-food restaurants, which are believed to be fuelling an unprecedented rise in obesity rates in these countries. This study tests this hypothesis using longitudinal data from China. Exploiting the opening of a Western-style fast-food restaurant, we conduct transition analysis to make a more convincing causal interpretation than the standard cross-sectional or fixed effect approach. Considering several measures of obesity, we find no evidence of substantial Western fast food effect. There is some indication of interesting effect heterogeneity, but overall, the fast food effect is not something that drives the rapidly rising obesity trend in China.

**F348 Love Between Us: Educational Assortative Mating and Expenditure Inequality in Indonesia**

*Rachmat Reksa Samudra, University of Indonesia; I Dewa Gede Karma Wisana, University of Indonesia*

Over the last decade, the Indonesian economy has shown a significant improvement: relatively stable and fast economic growth compared to neighboring countries and constantly decreasing unemployment rate as well as its poverty headcount rate. Despite the economic performance has been improved significantly, Indonesia's inequality rate has been seen gradually increasing over time. In 2013, its Gini index reached 0.413—the highest rate since the Indonesian Independence Day 69 years ago. Interestingly, inequality is not only a problem faced by Indonesia alone as a developing country but also developed country such as the United States.

Up until recently, several scholars have been debating about why inequality arises. For example, Jaumotte and Buitron (2015) argue that the decline of labor unions may increase inequality in the United States. This study mainly explores Becker's view on inequality from household perspective which is a new perspective for Indonesia. Becker (1973) pointed that the presence of assortative mating, in particular the positive one, will eventually increase inequality in the future via household allocation such as labor force participation between husband and wife. This study primarily wants to prove Becker's idea and therefore to investigate whether educational assortative mating, a mating based on education level of each spouse, happens in Indonesia and contributes to the worsening of expenditure inequality in Indonesia.

National Socio-Economic Survey (SUSENAS) of Indonesia year 2013, an annual household survey conducted and compiled by Indonesian Central Bureau of Statistics, is utilized as the main data source. Main variables which analyzed in this study are highest educational attainment of husband and wife in marriage  $m$  (therefore  $educ_m^h$  and  $educ_m^w$ ) and per capita expenditure of husband and wife in marriage  $m$  (therefore  $pcexp_m^h$  and  $pcexp_m^w$ ). This study employs Kendall Tau's correlation between  $educ_m^h$  and  $educ_m^w$  to know how strong the educational assortative mating and constructs Gini index based on per capita expenditure to know how unequal the expenditure inequality as Worner (2006) suggested. Answering the research questions, we build a counterfactual condition by randomize the spouses as if there is no educational assortative mating. We, then, compare Kendall's Tau correlation and Gini index of real condition to counterfactual condition. To check the consistency of results, we also perform a series of robustness checks.

This study hypothesized that educational assortative mating happens in Indonesia, when people choose their mate based on their education level compared to counterfactual condition. The Indonesian marriage market is unique compared to

**FRI**  
**0130 pm**

most countries which have been explored by far of this topic because of the strong religion background of its people, which dominated by Islam—that it is better to have a spouse who indifference, both economically and socially. This study also hypothesized that the existence of educational assortative mating causes an increase of expenditure inequality in Indonesia because spouses with the same or higher education level tend to enter the labor force and earn higher wage and therefore higher pooled household income compared to spouses with lower education level.



7 August 2015

0130pm to 0250pm

Room 837

**Session 7.7 Environmental Economics II**

**Session Chair** *Eden Yu, Chu-Hai College of Higher Education*

**F563 [Invited] Public Good Approach to an Environmental Economy**

*Eden Yu, Chu-Hai College of Higher Education*

This paper investigates the economic implications of environment in the 2x3 Heckscher-Ohlin model by expounding the multi-dimensional roles of the environment for the economy: (i) as a public input used for production of goods and services, (ii) as a by-product from production of goods and services, and (iii) as a public good directly affecting social utility. It shows that (i) the sectoral environment-output responses play a critical role for determining the environmental effects on factor prices, sectoral outputs and employment, and welfare; (ii) the optimal policy is free trade (a specific tax on pollution) under a dynamically stable (unstable) environment.

**F267 Cournot Competition and “Green” Innovation: An Inverted-U Relationship**

*Luca Lambertini, University of Bologna; Joanna Poyago-Theotoky, La Trobe University; Alessandro Tampieri, University of Luxembourg*

We examine the relationship between competition and innovation in an industry where production is polluting and R&D has the aim to reduce emissions (“green” innovation). We build up an n-firm oligopoly where firms compete in quantities and decide their investment in green R&D. When environmental taxation is exogenous, aggregate R&D investment always increases with the number of firms in the industry. Next we analyze the case where the emission tax is set endogenously by a regulator (committed or time-consistent) with the aim to maximize social welfare. We show that an inverted-U relationship exists between aggregate R&D and industry size under reasonable conditions, and is driven by the presence of R&D spillovers.

**FRI**  
**0130 pm**

**F323 Climate Change Competitiveness of SMEs in South Korea**

*Jeongin Kim, Chung-Ang University; Hyunjun Park, Chung-Ang University; Hyuna Kim, Chung-Ang University; Kwangrim Choi, BISD*

This article examines management capabilities of South Korean small and medium-sized enterprises (SMEs) to address climate change. We developed ‘Climate Competitiveness Index’ and evaluated the climate change competitiveness of 100 SMEs in 15 different industrial sectors. The index is based on 4 themes (Climate Risk, Climate Performance, Market Opportunity, Policy Cooperation, and Climate Adaptation) and following 18 indexes. We use empirical information from questionnaires to each company and disclosed reports they published each year. This article reflects a wide range of climate change-related factors that determine competitiveness of businesses and assessed these factors through the PSR structure. Climate Competitiveness Index is an indicator that shows how well companies are responding to climate change. Using this index, SMEs can develop market opportunities and can avoid risk arising from internal and external business environmental change induces from climate change. In this article, the competitiveness of SMEs turns out that: (1) high competitiveness in Climate Risk, and Policy and Cooperation themes (2) low competitiveness in Climate Performance, Market Opportunities, and Climate Adaptation themes.

**F366 Severe Air Pollution and Labor Productivity**

*Teng Li, National University of Singapore; Haoming Liu, National University of Singapore; Alberto Salvo, National University of Singapore*

We examine day-to-day fluctuations in worker-level output over 15 months for a panel of 98 manufacturing workers at a plant located in an industrial city in Hebei province, north China. Long-term workers earn piece-rate wages, with no base pay or minimum pay, for homogeneous tasks performed over fixed 8-hour shifts. Over the sample period, ambient fine-particle (PM<sub>2.5</sub>) mass concentrations measured at an outdoor air monitor located 2 km from the plant ranged between 10 and 773 micrograms per cubic meter (g/m<sup>3</sup>, 8-hour means), variation that is an order of magnitude larger than what is observed in the rich world today. We document large reductions in productivity, of the order of 15%, over the first 200 g/m<sup>3</sup> rise in PM<sub>2.5</sub> concentrations, with the drop leveling off for further increases in fine-particle pollution. A back-of-the-envelope calculation suggests that labor productivity across 190 Chinese cities could rise by on average 4% per year were the distributions of hourly PM<sub>2.5</sub> truncated at 25 g/m<sup>3</sup>. We also find reduced product quality as pollution rises. Our model allows for selection into work attendance, though we do not find particle pollution to be a meaningful determinant of non-attendance, which is very low in our labor setting. Subsequent research should verify the external validity of our findings.

**FRI**  
**0130 pm**

7 August 2015

0130pm to 0250pm

Ballroom III

**Session 7.8      Socio-economics**

**Session Chair**    Kian Teng Kwek, University of Malaya

**F277    Do Fertility Choices Increase the Survival of Widows? Evidence from a Large Dataset of China, 1791-1909 (CMGPD-LN)**

*Susu Wang, Shandong University*

In the literature, children play a role of incomplete insurance in markets lacking well-functioning credit mechanisms. We test this conjecture using the Multi-Generational Panel Dataset of Liaoning (CMGPD-LN) which covers the feudal years of 1749 to 1909 during the Qing Dynasty. This data set comprises mostly farmers and therefore is free of complications such as social nets, pension plans, and government intervention that modern data entails. We use a unique identifying strategy in order to see how the number of children one has prolongs the lifespan of the parent: those who become widows.

Since widowhood is an imposed condition which is not directly related to the prior health condition of the widow, we make the case that the ill effects of the health condition of the remaining partner must come after widowhood, albeit emotional distress, or loss of economic resources. We examine across cohorts of widows, whether the number of children one has prior to widowhood improves one's survivability thereafter. The results show that individuals with children live longer than those without children. Those with daughters tend to live longer than those with sons. We control for all other kinship relationships such as other living relatives who might provide social capital but find that the impact of children on survivability is still large and significant.

**F284 An Empirical Analysis of Marital Status in Japan**

*Koji Yasuda, Kobe University; Tomoko Kinugasa, Kobe University; Shigeyuki Hamori, Kobe University*

This study analyzed the interdependent relationship between marital status, fertility rate, and other socioeconomic factors in Japan in the 2000s. The empirical results showed that the stability of male living standards had the most positive influence on marital status. We also found that the co-residence between unmarried adult children and their parents had a negative influence, particularly on male marital status. Regarding co-residence rate, we showed that the rate is associated with the economic condition of parents, which is the main finding of our study. Therefore, the economic burden on unmarried children who have poor parents would also be important in explaining the problem of increasing unmarried rate.

**F368 Fridays Praying or Sundays Voting: The Effects of Islamic Religion and Democracy in Reducing Income Inequality**

*Saeed Khodaverdian, Frankfurt School of Finance and Management*

In democratic countries, the state intervenes in market developments as it raises taxes and redistributes income. In Islamic countries, in contrast, such interventions do not exist but redistribution takes place based on religious obligation (one of five pillars of Islam). While the former represents a centralized system governed by the state, the latter is de-centralized as income is shared on an individual basis without regulations. We contrast these two systems in their effectiveness to reduce income inequality. More precisely, we consider existing propositions for exogenous variation in each Islamic religiosity (Ramadan Fasting) and democracy (snowballing by neighboring countries) to overcome possible endogeneity issues. Doing so on an annual basis for the 1960-2010 period, we present evidence that the effects go in different directions. In Islamic countries, religiosity shows to reduce income inequality while democracy seems to have increased it. Both effects are significant and they do not change when challenging them for robustness: varying definitions, considering both alternative instruments and indicators for democracy, and including important covariates, such as GDP per capita. We explain these findings by the elite-theory: in a centralized system the elite can undertake actions either to avoid the establishment of certain (inequality-reducing) policies or to influence them to their benefit. In a de-centralized system, in turn, they do not have such options. In conclusion, our findings allow casting doubt on state-interventionism as a tool to correct market failures.

**FRI**  
**0130 pm**

## **F402 Comparison of Reference Groups in Relative Standard of Living**

*Mengyuan Zhou, Keio University*

This study examined how one's reference group for standard of living is determined by using the data from the Preference Parameters Study of Osaka University. We found that using nationwide indicators as a reference point is less convincing, since the most cited reference group of standard of living is neighbor instead of average person in US/Japan/China. Especially for Japanese women, those who are over 50 years old in Japan and Americans who are between 30 to 50 years old, they compare less to the whole nation in general. Also, we need to think about whether it is reasonable and convincing to use reference groups of income comparison when we conduct the research on happiness or life satisfaction, since the distribution of reference groups for standard of living varies from the ones for income comparison. In addition, we argued that cultural diversity or social norms would account for the differences in the distribution of the reference groups. According to Chie Nakane's review about vertical society and Abe's study about *seken-no-me*, information accessibility is not the only reason for a Japanese to choose a specific reference group, but the motivation for competitive comparison and the desire of 'keeping with' others play the main role in determinants.

7 August 2015

0430pm to 0610pm

Room 831

**Session 8.1 Labor and Demographic Economics II**

**Session Chair** Kaiwen Leong, Nanyang Technological University

**F295 The Decision to Retire Early: Evidence from Private Service Sector in Thailand**

*Kaewkwan Tangtipongkul, Thammasat University; Supachai Srisuchart, Thammasat University*

Using the worker survey data from Foundation of Thai Gerontology Research and Development Institute, this paper analyzes the decision to plan early retirement from private service sector in Thailand. Private Service sector limits to wholesale, retail, hotel and restaurant industries. The analysis is restricted to individuals above aged above 45 years at the time of the survey. The data set includes information gathered on 611 individuals. The logistic regression model and Pearson correlation were estimated. The results show that individuals with government pension have higher propensity to delay their plan to retire early approximately 15 percent. Availability of allowance for the age care program also have higher propensity to delay their plan to retire early approximately 8 percent. These findings call into question the belief that pension system and how government set the criteria to receive these benefits are important factor in individual decision making. Regarding type of industry, individuals who work in the retail or wholesales industry except motor vehicle industry have higher propensity to delay their plan to retire early more than 10 percent. Male still have significantly higher propensity to delay their plan to retire early approximately 7 percent compare with women.

**FRI**  
**0430 pm**

**F307 Racial Trends in Labor Market Outcomes Pre- and Post-2008 Financial Crisis**

*Jonathan Ng Wei En, Ministry of Manpower; Ee Cheng Ong, National University of Singapore*

We examine the racial trends in the U.S. labor market between 2005 and 2012 using data from the American Community Survey. We explore the racial differences in earnings, unemployment, and labor force participation. Hispanics and Blacks have poorer labor market outcomes than Whites, and the outcomes of Blacks have worsened since the 2008 financial crisis. Between 2008 and 2012, relative to Whites, the earnings of Black males and females decreased by 2.7 and 3.6 percentage points, the unemployment rates increased by 0.6 and 1.1 percentage points, and the labor force participation rates (LFPR) decreased by 1.2 and 0.9 percentage points. Using the Blinder-Oaxaca (1973) methodology, we show that the minority-white earnings gaps are largely due to differentials in characteristics, e.g., education level and experience, while the minority-white unemployment and LFPR gaps are largely due to differentials in the returns to characteristics, which are attributed to discrimination or unobserved group differences.



**F309 Ownership-related Wage Differentials by Occupation in Vietnamese Manufacturing**

*Kien Trung Nguyen, The University of Danang; Eric D. Ramstetter, Asian Growth Research Institute*

This paper examines wage differentials for four types of workers employed by medium-large (20 or more employees) wholly-foreign multinational enterprises (WFs), joint-venture multinationals (JVs), state-owned enterprises (SOEs), and domestic private firms in Vietnamese manufacturing in 2009. When all sample firms were combined, unconditional JV-private and WF-private wage differentials were 106-124 percent for managers, 78-87 percent for professionals and technicians, 56-68 percent for clerical and support workers, and 22-48 percent for production workers. Corresponding, conditional wage differentials which account for the influences of worker education and sex, in addition to firm capital intensity and size, were positive and usually significant, but smaller, 72-78 percent for managers, 32-36 percent for professionals and technicians, 23-28 percent for clerical and support workers and 15-16 percent for production workers. SOE-private differentials were all much smaller. When estimated at the industry-level, conditional WF-private differentials were positive and significant for most occupations and industries. JV-private differentials were also positive and significant in most industries for highly paid managers or professionals and technicians, but not for lowly paid clerical and support workers or production workers. Most SOE-private differentials were also insignificant when estimated at the industry level. In short, there was a strong tendency for MNE-private differentials to be larger for managers than for professionals and technicians, and a somewhat weaker tendency for differentials to be larger for professionals and technicians than for clerical and support workers.

**FRI**  
**0430 pm**

**F350 Modeling the Joint Determination of Labor Market Participation and Educational Attainment in Australia: A Simultaneous Equations System**

*Shamsul Arifeen Khan Mamun, University of Southern Queensland;  
Khorshed Alam, University of Southern Queensland*

Many studies have examined the determinants of labor market participation (or labor supply) using single equation model where the main assumption has been participation in education (demand for education) is exogenous. The literature of economics of education suggests that participation in education is an endogenous. Because of endogeneity of education, previous labor market studies suffer from the problem of potential simultaneous bias. Correcting the simultaneous bias problem, this study has modeled the joint determination of labor market status and educational attainment in the Australian labor market. The data are drawn from the Australian Bureau of Statistics. This research has found that higher educational attainment increases the probability of labor force participation for both males and females across all age groups. However, as for the feedback an effect, this study has found that labor market status has a significant positive influence on educational attainment. This implies that employed people are more likely to advance their education. Finally, the exogeneity hypothesis of education is rejected for both males and females of all age groups, implying that consideration of education as an exogenous variable may result in an inappropriate estimation of the effect of an individual's level of education on labor force participation.

**F525 Women's Human Capital across Sectors in Malaysia: Insights from a Selection-correction Multinomial Logit Model**

*Husaina Banu Kenayathulla, University of Malaya*

Malaysia has been striving to achieve gender equality in terms of educational and employment opportunities. Despite the improvements in human capital demonstrated through enrolment in education, Malaysia still lags behind other developing countries in terms of labor force participation rates. The primary purpose of this study is to identify the determinants of females' labor force participation across three different kinds of work: wage employment, self-employment and dual-employment. This study uses 2007 Household Income Survey and applies a sophisticated selectivity correction technique based on multinomial logit to estimate the earnings equations for the different employment sectors. Most of the prior studies in Malaysia have not addressed selectivity bias due to non-random participation of individuals in the labor force (Chung, 2003; Ismail, 2007). Those that have primarily have focused on correcting for sample selectivity based on a univariate model (Schafgans, 2000; Soon, 1987; Blau, 1986) in which individuals simply decide between waged and non-waged work. Thus, this study applies a sophisticated selectivity correction technique developed by Bourguignon, Fournier & Gurgand (2007) to estimate the earnings equations for the different employment sectors. The findings suggest that high levels of education pay off females in all sectors of employment. Ethnicity is an important determinant of earnings for women in the wage and self-employment sectors. In terms of the selectivity correction terms, there is a positive selectivity into the wage-employment sector out of the dual-employment sector. This might be due to queuing for wage employment, which has a better prospect in the future.

**FRI  
0430 pm**

7 August 2015

0430pm to 0610pm

Room 832

**Session 8.2 In Memorial of Professor Lim Hua Sing**

**Session Chair** Pradumna Bickram Rana, Nanyang Technological University

**F564 Factors Responsible for Recent Infrastructure Boom in Asia: Results of a Perception Survey**

*Pradumna Bickram Rana, Nanyang Technological University; Wai-Mun Chia, Nanyang Technological University*

Presently Asia is experiencing an infrastructure development and connectivity boom. Signs of this boom include the “Go West” and the “New Silk Road” policies in China and the “Look East” policies in India, on-going efforts at various sub-regional levels, renewed interest in infrastructure financing at multilateral development banks, and the establishment of various China-led funding institutions. This paper assesses the relative importance of various strategic and economic factors in explaining this boom by conducting a perception of Asian Opinion Leaders. A key finding is that although strategic factors are the major drivers of Asian connectivity, economic considerations are also important. In fact, most opinion leaders feel that it was the growing importance of supply chain trade in Asia and the prospects for such trade in the future that has revived that the case for land connectivity in the continent. The survey also finds that reduction in trading costs between South Asia and East Asia could lead to a win-win situation for all countries: It could revive economic integration in South Asia. This means that the various initiatives such as China’s “One Belt, One Road” policy, although a key component of China’s foreign policy, could be mutually beneficial to most countries in Asia and should be taken seriously by them. For its part, China needs to be more transparent and provide more information on the implementation of its “New Silk Road” policy

**F133 Governance and Investments: A Panel Data Study of the ASEAN Member Countries**

*Fe B. Evangelista, St. Scholastica's College*

Governance refers to the actors, be it local or international organizations, institutions or even traditions by which authority in a country is exercised. World Bank's Worldwide Governance Indicator (WGI) is a consolidated measure of a country's quality of governance. The term governance is wrought with complications as its meaning may differ in various fields. This study considers the term institutional quality or governance with the same meaning and seeks to identify its relationship with the Foreign Direct Investments (FDI) in the context of the ASEAN member countries namely, Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. A panel regression was done to identify the relationship between governance and FDI. Upon the consideration of econometrical problems present for a panel study, Panel Regression One Way Cross-section Fixed Effects (FE) Estimation with Cross-section SUR showed to be the best model, as it would identify the unbiased coefficients. Results indicate that there is a relationship between the six dimensions of WGI measurement and the FDI of the ASEAN member countries, complimenting the Institutional FDI fitness theory. The other theoretical foundations especially the governance theory considered in this paper also suggests that the ASEAN as an institution has a role in affecting the FDI inputs in its ten member countries, although the magnitude of its effect cannot be determined by this empirical study. Further, the FE estimation suggests that the countries have unique assets which are related to its governance quality and the existence of contemporaneous correlation suggests that there is a significant dependence between the cross-section units of this study.

**FRI**  
**0430 pm**

**F302 Intra-regional Trade in Intermediate Goods and the Choice of Exchange Rate Regime in East Asia**

*Tuan Khai Vu, Meisei University*

Over the last decades, there has emerged a unique production and trade structure in East Asia: countries in the region trade intermediate goods heavily with themselves while trade final goods more with the rest of the world. What is the implication of this to the choice of exchange rate regimes for East Asian countries? To answer this question, I build a three-country New Open Economy Macroeconomic model which incorporates intra-regional trade in intermediate goods along with trade in final goods. An interesting feature of the model is that it exhibits a new linkage in the production side between East Asian countries in the presence of intra-regional trade in intermediate goods. The optimal choice of exchange rate regime depends on the price setting behavior in different markets of firms involving in trade. In the most realistic case in which the US dollar is used as the invoicing currency in trade, a peg to a currency basket with a dominant weight assigned to the US dollar would be the desirable for East Asian countries because it helps stabilize the fluctuations of their current account.

**F276 ASEAN Economic Integration and Its Impact on Skill Inequalities**

*Tri Mulyaningsih, University of Sebelas Maret*

The economic integration within ASEAN countries has been strengthening as shown by lower import tariff near to zero. By having regional integration, ASEAN aims to enhance the flow of goods and services within the member countries. The literature suggests that trade liberalization contributes to widen the skill inequalities in the labor market due to between-sector demand shift towards skilled workers. This study is keen to investigate the skill premium in the Indonesian labor market in the 2000s. Further, the examination of the impact of trade liberalization on skill and inequalities will be conducted. This study will employ the variation in wages and tariff across industries to identify the impact of trade on wages. This method is prominent in trade and labor literature and has been employed by extensive number of studies for example Krueger and Summers (1988) up to Mishra and Kumar (2005). The dataset is developed by combining the micro data of Indonesian Labor Market Survey (Sakernas) and ASEAN tariff data. This study contributes to fill the knowledge gap in trade and labor issues particularly on skill inequalities in emerging country that experiencing economic integration. Therefore, Indonesia can generate the benefit from opening its economy to its neighbor countries.

**F332 ASEAN-10 Regional Convergence and the Role of Intra Trade and Spatial Dependence**

*Yanuarita Hendrani, Parahyangan Catholic University*

The accession of new members (Cambodia, Lao, Myanmar and Vietnam) in the late 90s means an increase in income disparities in ASEAN countries. This study seeks to know if there is a tendency for convergence in ASEAN member countries (an existence of catch-up effect) after AFTA is fully effective. Countries that form Free Trade Area or Custom Union are usually geographically located close to one another. In trade, geographical proximity reduces transportation costs among neighboring countries. The elimination of trade barriers adds another benefit, namely, access to larger market that enables firms to optimize their production through economies of scale and scope. Therefore it is expected that there would be a spatial correlation among countries close to each other geographically. Besides that, this research also examines the role of intra trade and external trade on income per capita of the ASEAN-10 countries. Using a panel data of ASEAN member countries observed in 9 years after AFTA, the preliminary results show that the income per capita convergence seems to be weak. There is no significant spatial correlation among ASEAN-10 countries that causes high income countries or low income countries to cluster with each other, but intra trade and external trade (with non ASEAN countries) have positive impact on economic growth.

**FRI  
0430 pm**

7 August 2015

0430pm to 0610pm

Room 833

**Session 8.3      Macroeconomics and Monetary Economics**

**Session Chair**    Paul Sau Leung Yip, Nanyang Technological University

**F565    [Invited] CRIX - a Crypto Currency Index**

*Wolfgang Karl Härdle, Humboldt-Universität zu Berlin*

We all believe that we are about to enter the era of digital finance. In fact we are already inside the digital economy. The market of e-x (x = “finance”, “money”, you name it...) has not only picked up enormous momentum but has become standard for driving activities of the global economy. We buy with a few clicks at y and pay at z for our purchase. Cryptocurrencies widened the angle towards this new level of economic interaction. Since Bitcoin’s appearance a bunch of new cryptos spread the web and offered new ways of proliferation. The crypto market then fanned out and showed clear signs of acceptance and deep liquidity so that one has to look closer at the general moves and dynamics. CRIX - a Crypto currency index, [www.crix.hu-berlin.de](http://www.crix.hu-berlin.de) has been created for this purpose. CRIX gives insight into the evolvement of digital finance and provides us with answers to how these new elements of the global economy position. CRIX also tells us which cryptos are strong and are due to high PD



**F058 Can We Stabilize the Price of a Cryptocurrency? Understanding the Design of Bitcoin and Its Potential to Compete with Central Bank Money**

*Mitsuru Iwamura, Waseda University; Yukinobu Kitamura, Hitotsubashi University; Tsutomu Matsumoto, Yokohama National University; Kenji Saito, Keio University*

This paper discusses the potential and limitations of Bitcoin as a digital currency. Bitcoin as a digital asset has been extensively discussed from the viewpoints of engineering and security design. But there are few economic analyses of Bitcoin as a currency. Bitcoin was designed as a payments vehicle and as a store of value (or speculation). It has no use bar as money or currency. Despite recent enthusiasm for Bitcoin, it seems very unlikely that currencies provided by central banks are at risk of being replaced, primarily because of the market price instability of Bitcoin (i.e. the exchange rate against the major currencies). We diagnose the instability of market price of Bitcoin as being a symptom of the lack of flexibility in the Bitcoin supply schedule - a predetermined algorithm in which the proof of work is the major driving force. This paper explores the problem of instability from the viewpoint of economics and suggests a new monetary policy rule (i.e. monetary policy without a central bank) for stabilizing the values of Bitcoin and other cryptocurrencies.

**FRI  
0430 pm**

**F305 Assessing the Strength of the Bank Lending Channel in Australia**

*Eddie Cheung, Open University of Hong Kong*

This paper makes use of aggregate time series macroeconomic data from the banking sector in Australia to assess the strength of the bank lending channel of monetary policy. Changes in the spread between bank loan rates and bond rates reflect asymmetry between the markets for bank loans and bond finance, reflecting the strength of the bank lending channel. The main findings are that there bank lending have in general become more expensive relative to bond finance after the global financial crisis in 2008. This trend holds for both large and small loans. Before 2008, rising deposits has acted as a source of funds increasing the supply of bank loans but this effect is reversed afterwards. The growing share of foreign funding in the Australian banking sector coincides with a strengthening of the constraint that bank loan supply places on firm financing.

## **F265 Understanding Financial Interconnectedness in G4+1 Economies**

*Kian Teng Kwek, University of Malaya; Cho-Wai Cho, Taylor's University*

This study examines the interplay of policy influence between central banks and shadow banks in order to understand the interconnectedness amongst the G4+1 economies (these economies include the U.S., U.K., Euro Area, Japan and China). First, broad patterns of financial influence between central banks, regulated markets - commercial banks, and unregulated markets - OTC derivatives market are measured to compare their effects on the global GDP using paths analysis and structural equation models. Establishing the relative importance of these players in the global financial system is important, because it helps to understand the major factors that are underpinning the global financial system. Second, specific impacts of regulated policies (e.g. monetary policy using specific interest rate instruments) and unregulated policies (e.g. offshoring of large flows of funds not captured in the financial accounts of the balance of payment) are measured using pooled regressions to compare the impact of direct and indirect effects of these policies on the global GDP.

The findings will shed some light on the important and complementary roles of the central banks, the shadow banks, and the unregulated policies during the financial crisis. Since the global central banks (e.g. the Federal Reserve, the European Central Bank, central banks of Denmark and Switzerland, and Bank of Japan) have pushed interest rates to historic lows in a bid to counter the worst of financial crisis since the Great Depression, the average global growth rates did not reflect a successful central banking policy in stimulating economic growth. Did the monetary policy chiefs failed in reining-in the interest rate risks in the banking sector? Again the findings would provide some insight into the financial sector highlighting the role of global shadow banking credit against the global central banking system, that is, the complementary and not competing role of lenders of last resort (LOLR), i.e. lending in response to a financial crisis.

**FRI**  
**0430 pm**

7 August 2015

0430pm to 0610pm

Room 834

**Session 8.4      Game Theory II**

**Session Chair**    Ernie Teo, Singapore Management University

**F150    Nash and Cooperative Consumption Taxes When Pollution Affects Consumption**

*Michael Michael, University of Cyprus; Panos Hatzipanayotou, Athens University of Economics and Business*

In a model of two small open economies with consumption generated cross-border pollution, we introduce (i) non-separability in consumption between polluting commodities and clean environment, and (ii) different rates of pollution per unit of consumption. We examine, among other things, (i) the non-cooperative equilibrium consumption taxes and compare them to the equilibrium taxes when pollution is local and when consumption is independent from pollution and (ii) the cooperative equilibrium consumption taxes and we compare them to the non-cooperative tax rates. We show that (i) tax harmonization may not be the optimal policy and (ii) when pollution and the polluting good are complements in consumption; cooperative consumption tax can be lower than the Nash equilibrium tax.

**F229 Foreclosure Auctions**

*Andras Niedermayer, University of Mannheim; Artyom Shneyerov, Concordia University; Pai Xu, University of Hong Kong*

We develop a novel theory of real estate foreclosure auctions, which have the special feature that the lender acts as a seller for low and as a buyer for high prices. The theory yields several empirically testable predictions concerning the strategic behavior of the agents, both under symmetric and asymmetric information. Using novel data from Palm Beach County (FL, US), we find evidence of both strategic bidding and asymmetric information, with the lender being the informed party. Moreover, the data are consistent with mortgage securitization dissipating the original lender's information and leading to less aggressive bidding in the auction.

**F239 Labor Tournament with Sabotage: Equilibrium, Optimal Design and Experimental Evidence**

*Haoming Liu, National University of Singapore; Jingfeng Lu, National University of Singapore; Yohanes Eko Riyanto, Nanyang Technological University; Zhe Wang, National University of Singapore*

A model of two-player tournament where the effects of workers' productive and sabotage efforts are interdependent is analyzed in this paper. The players are asymmetric in both their productive and sabotage effort efficiency. We establish the existence and uniqueness of pure-strategy equilibrium for any level of pay dispersion, and explicitly provide necessary and sufficient conditions for different types of equilibrium to prevail. If the pay dispersion is smaller than a lower threshold, then in the equilibrium neither worker sabotages the other, while if the pay dispersion is greater than an upper threshold, both workers sabotage each other in the equilibrium. If and only if the pay dispersion is in between the two thresholds can we find the equilibrium in which only one worker sabotages the other. For the symmetric setting where the two workers are symmetric in two dimensions (i.e. the marginal costs of both productive and sabotage efforts), we characterize the optimal pay dispersion that maximizes the firm's expected profit. Given the effectiveness of productive effort, the optimal pay dispersion induces positive sabotage, if and only if sabotage is less effective, but paradoxically the marginal cost of sabotage is small. While the optimal pay dispersion decreases with the effectiveness and increases with the marginal cost of sabotage, it does not change monotonically with the effectiveness of productive effort. The theoretical predictions are supported by the results of an experimental study based on the model.

**F380 Price Run-ups in Strategic Sequential Bidding for Government Land Auction Sales: Evidence from Singapore**

*Jing Li, Singapore Management University; Ernie G. S. Teo, Singapore Management University*

The Singapore government regularly releases land for private sector development through the government land sales (GLS) program. GLS are managed by land sales agents such as the Urban Redevelopment Authority (URA) through a first-price sealed-bid auction. Given significant economies of scale, there are few large property developers in Singapore participating in GLS auctions repeatedly. These developers bid strategically in the auction stage to meet competition in the secondary developed property market. Using differentiated price competition models as a theoretical foundation, we develop a two-stage model where an incumbent winner (of land from a previous auction) bids on a new piece of land with the anticipation of competition between developed properties on both land parcels. We found that the closer substitutes both pieces of land are, the more likely that the incumbent will bid higher. The model predicts that the incumbent will bid higher than the winning price (of the previous parcel), but tend not to win the bid. Strategically, the incumbent prefers that the cost of land be high but would rather not own the land due to high costs of managing two parcels of land within a close time frame. We found this to be consistent with anecdotal evidence and with our empirical findings. Looking at GLS for residential property, we found that a tenderer's bids are higher where there was a previous piece of land sold within 2 years and located within 4000 meters in distance and the margin decreases as the distance becomes larger. Our analysis shows that given the competitive environment in Singapore, land prices are driven up over time due to strategic behavior of bidders. In times of rising property prices, this suggests possibilities of supply side cooling measures such as not allowing winning bidders to bid in subsequent parcels within close proximity and time.

**FRI**  
**0430 pm**

7 August 2015

0430pm to 0610pm

Room 835

**Session 8.5 Trade and Economic Integration**

**Session Chair** Masahiro Kawai, University of Tokyo

**F570 [Invited] ASEAN Economic Integration, RCEP and TPP**

*Masahiro Kawai, University of Tokyo*

This paper explores ASEAN's long-term challenges for trade and foreign direct investment (FDI). The region has emerged as an important production base for multinational corporations by joining East Asia's supply chains. While proceeding to establish the ASEAN Economic Community (AEC) by the end of 2015, ASEAN has also forged five major free trade agreements (FTAs) with its dialogue partners (China, India, Republic of Korea, Japan, and Australia–New Zealand) and is currently negotiating the Regional Comprehensive Economic Partnership (RCEP). In addition, four ASEAN member states are working on Trans-Pacific Partnership (TPP) negotiations. Econometric evidence suggests that (i) trade flows and inward FDI mutually reinforce each other, i.e., an increase in trade flows stimulates inward FDI and vice versa; (ii) a larger market attracts more inward FDI; (iii) FTAs tend to help stimulate inward FDI; and (iv) strong institutions, good physical infrastructure and low costs of doing business are critical in boosting inward FDI. The paper concludes that in the long run ASEAN should aim to further integrate itself with the rest of Asia and the world (through a Free Trade Area of the Asia-Pacific and an Asia–Europe FTA), while substantially deepening its internal integration (by moving from the AEC to a customs and economic union) and thereby maintaining ASEAN centrality.



**F110 The Plant-moving Threat As a Motivation for Offshoring**

*Chul-Woo Kwon, Kyungpook National University*

This study develops a simple theoretical model by combining a collective wage-bargaining model and an orthodox offshoring model with firm heterogeneity to examine the threat motivation for offshoring. The theoretical analysis shows that firms may have an incentive to offshore and explore their ability to plant moving as a threat and suggests that highly productive and offshorable firms pay lower wages based on such threats.

**F210 A Linder Hypothesis for Trade Channeled GDP Co-movement**

*Xiaoping Chen, Nanyang Technological University; Yunong Li, National University of Singapore*

Higher trade intensity contributes to more GDP co-movement across countries. Recent studies also point out the different effects on co-movement across developed and developing countries given the same trade intensity. This paper proposes a Linder hypothesis for the trade channeled GDP co-movement. We differentiate between inter-industry and intra-industry trade. Countries with similar income levels tend to have more intra-industry trade, which contributes more to GDP co-movement compared with inter-industry trade. As a result, for any given bilateral trade intensity, the effect on co-movement is stronger if the two countries have similar income levels. We confirmed this prediction with various data samples.

**FRI  
0430 pm**

**F294 Eurasian Economic Union: A Challenge for EU Policy Towards Kazakhstan**

*Agnieszka Konopelko, Bialystok University of Technology*

As a top trading partner and the first foreign investor in Kazakhstan, attempting to deepen bilateral relations and review previous policy towards Kazakhstan and the post-Soviet Central Asian region as a whole, the European Union is facing up to a new set of internal and external conditions which affects its approach to the East. One of the crucial determinants taken into account in the EU policy towards its Kazakh partner derives from the more advanced processes of Eurasian integration created by the Russian Federation. The question is whether the EU will be able to compete or complement the consistent steps of the Russian integration project and whether the EU should move beyond a trade and investment approach and place emphasis on the other strategic areas? The main objective of the research concentrates on the identification and examination of the relationship between political decisions (EU Strategy, Eurasian Economic Union) and the economic ties of Kazakhstan and its main strategic partners. The research is developed through empirical analysis and the interpretation of data and official documents of the EU and Kazakhstan, as well as analytical theoretical research on European Union external policy and the development of the Eurasian Economic Union. Considering the current geopolitical situation in the Ukraine and the Central Asia, the new 'EU-Kazakhstan Enhanced Partnership and Cooperation Agreement' will develop more areas targeted at security and stabilization issues. However, the top-down initiatives are only the legal basis of sectorial cooperation; the intensification of bilateral relations comes from bottom-up cooperation and people-to-people contacts.

**F398 Tracing and Quantifying Thailand's Linkages to the Global Supply Chain: the Modification of World Input-Output Database (WIOD) and the Applications of Leontief Multiplier and Structural Path Analysis**  
*Nattapong Puttanapong, Thammasat University*

Trade openness has continuously gained its significance on the structure of Thai economy. The empirical evidence shows that the increasing inflows of intermediate, machinery and Foreign Direct Investment (FDI) have simultaneously correlated with the exports of manufacturing products. This evolution indicates the deeper connection of Thai economy to the global supply chain. Based on this fact, this study introduces the new approach of quantifying and tracing the network of impact transmission between the international supply chain and Thai economy. To construct the global input-output table exhibiting Thailand's international trade linkages, the World Input-Output Database (WIOD) is extended to include Thailand's domestic and international trade statistics. In order to extract the main structure of international production network, the computational techniques of Leontief backward and forward multipliers and the Structural Path Analysis (SPA) are applied to the newly constructed WIOD table. The computational outcome indicates that among Thailand's production activities, the electronics manufacturing sector has the highest value of both international backward and forward multipliers. The result obtained from SPA also reveals the international production network of electronics industry linking manufacturing processes across Thailand, Japan, China, Korea, US, EU, Taiwan and rest of the world. The SPA result identifies the similar pattern of linkages to the international supply chain of Thailand's manufacturing sector. These findings signify the linkages between Thai economy and the international production network, and the importance of the transmission mechanism of impacts propagating through connected supply chains.

**FRI**  
**0430 pm**

7 August 2015

0430pm to 0610pm

Room 836

**Session 8.6      Macroeconomics VI**

**Session Chair**    Takashi Kamihigashi, Kobe University

**F027    On The Efficiency of Commodity Markets - Do Commodities Futures  
Co-move Excessively?**

*Qin Xiao, University of Hull*

Excess co-movement between seemingly unrelated commodity prices has been interpreted as reflecting “herd” behaviour, casting doubt on the efficiency of commodity markets, which in turn has implications on monetary policies and on the hedging or diversification strategies of fund managers. Empirical tests on excess co-movement hypothesis (ECMH) since Pindyck and Rotemberg (1990) have yielded mixed results, partly because of the selection of methodologies and partly commodities. We re-visit ECMH by examining six nearest futures contracts of three seemingly unrelated commodities: gold, crude oil and coffee. Using cross-spectral analysis, we found significant co-movement between gold and coffee and between crude oil and coffee at a weekly cyclical component. This can be largely but not completely explained by a trade-weighted USD exchange rate index, suggesting the observed excess co-movement to be the result of market overreaction to short-term fluctuations in macroeconomic activities.

**F165 Predicting Indonesia External Debt Crisis: An Artificial Neural Network Approach**

*Riznaldi Akbar, University of Western Australia*

In this study we compared the performance of the Artificial Neural Network (ANN) model with back-propagation algorithm in correctly predicting in-sample and out-of sample external debt crises in Indonesia. We found that exchange rate, foreign reserves and exports are the major determinants of an external debt crisis. The ANN in-sample performance provides relatively superior results. The ANN model is able to classify correctly crises of 89.12 per cent with reasonably low false alarms of 7.01 per cent. For out-of-sample prediction, the performance is not as good as the in-sample prediction. It is argued that the ANN model tends to over-fit the data for the in-sample prediction, while it cannot fit the out-of-sample very well. The 10-fold cross validation has been used to improve the out-of-sample prediction accuracy and our ANN model generally performs reasonably well. The results also offer some policy implications. The out-of-sample performance could be very sensitive to the size of the samples, as it yields a higher total misclassification error and lower prediction accuracy. The ANN model could be used to identify past crisis episodes with some accuracy, but predicting crises outside the estimation sample is much more challenging because of the presence of uncertainty.

**F219 Dark Matter and Global Imbalance**

*Chien-Jung Ting, National Chin-Yi University of Technology*

In this paper, we pay attention to the contribution of conventionally omitted dark matter (DM) on sustainability of current account imbalance. According to the definition of DM in Hausmann and Sturzenegger (2006, 2007), the existence of undervalued foreign assets and liabilities, and this difference are called dark matter. We further discuss its influence on current account imbalance's sustainability under various country backgrounds. Using panel data, our empirical results find that abnormal return and PPP deviation help the convergence rate of current account imbalance toward steady-state to become faster. For the prominent valuation effects and better investment skill of high-income countries and middle-income countries, DM can significantly back up current account imbalance of those countries. Real exchange rate depreciation also aids the persistence of current account imbalance in high-income countries and middle-income countries.

**FRI  
0430 pm**

**F529 Asymmetric Effects of Exogenous Tax Changes**

*Syed M. Hussain, Lahore University of Management Sciences; Samreen Malik, New York University - Abu Dhabi*

We study whether output responds symmetrically to tax increases and decreases in postwar US data, using the identification strategy in Romer and Romer (2010). We find evidence of important asymmetries: the output response to a tax increase is statistically insignificant, but output shows a significantly positive and permanent increase following a tax decrease. We show that this asymmetry appears to be driven by individual- income tax changes, and is transmitted to the economy through asymmetric response in aggregate consumption to positive and negative tax changes. We also present a simple model that rationalizes our empirical findings, and illustrates how asymmetric output and consumption responses to sign-based tax changes can be generated by plausible consumption-adjustment costs.

**F551 Rural-urban Interdependence, Structural Change, and Development**

*Keigo Nishida, Fukuoka University*

This paper presents a model of development that explicitly incorporates the interaction between rural agriculture and urban non-agriculture. The increase of capital stock leads to capital intensive agriculture and the reallocation of labor from agriculture to non-agriculture. People who migrate to urban areas create new intermediate goods and enhance non-agricultural productivity, which, in turn, causes capital accumulation and capital intensive agriculture. This mechanism creates multiple steady states, and the economy may fall into a poverty trap or experience sustained growth.

7 August 2015

0430pm to 0610pm

Room 837

**Session 8.7 Environmental and Energy Economics II**

**Session Chair** Fuhai Hong, Nanyang Technological University

**F033 Determinants of Household Choice of Coping Strategy to an Extreme Flood Event in the National Capital Region, Philippines**

*Jamil Paolo Francisco, Asian Institute of Management*

This study identifies the factors influencing household choice of coping strategy to an extreme flood event in Marikina City in the national capital region of the Philippines. A survey of 400 households was conducted in the four most severely affected barangays (counties) of the city. A multinomial logistic model was used to analyze household choice of coping strategy among three possible alternatives: (1) reactive and short-term anticipatory behavior only, (2) reactive and anticipatory behavior plus general long-term preventive measures, and (3) reactive and anticipatory behavior plus preventive and proactive measures. Results showed that wealth, income, learning from past experience, advice from the media, and people's perceptions/attitudes towards natural disasters had significant influences on household choice.

**FRI**  
**0430 pm**

**F275 Towards Sustainable Development of Indonesia Extractive Industry**

*Siwi Nugraheni, Parahyangan Catholic University; Iwantia S. Mokoginta, Parahyangan Catholic University; Difa Dini Asfari, Parahyangan Catholic University*

Applying sustainable development concept in extractive industry (i.e. oil, gas, coal and other minerals) is challenging. As the stock of the exhaustible resources will deplete along with their utilization, it is impossible to keep the same quantity and quality of the resources all the time. Some researchers offer ‘weak sustainable development’ concept in utilizing non-renewable natural resources. In this concept, utilization of non-renewable resources is sustainable if the depletion of the natural resource is replaced by other capitals (e.g. human capital, financial capital or physical capital), so that the future generations could use those capitals to meet their needs. Sustainable Development Index (SBI) is an indicator that is based on the ‘weak sustainable development concept’ and is used to measure whether the spending of the state income from non-renewable resources (extractive industry) is sustainable or not. The research analyses the spending of the Indonesian government budget that is received from extractive industry, using SBI. Data from the year of 2010 – 2013 show that SBI for Indonesia is ranged from 0.8 to 1.2, meaning that the income from utilizing the exhaustible natural resources of the country is not always sustainable.

**F435 Assessing the Effects of Energy Using Products (EuP/ErP) on Thai Electric and Electronic Industry**

*Monthien Satimanon, Thammasat University; Thasanee Satimanon, NIDA*

The paper evaluates the effects of European energy using products policy on Thai electric and electronic industry using time series analysis, gravity model, and in-depth interview with the manufacturing sector. The time series models of manufacturing production index are estimated to study the trend and cointegration of industry production with Thai and EU GDP. The dynamic gravity model with Poisson Pseudo Maximum Likelihood (PPML) has been adopted to disentangle the effect of such policy from the recent free trade agreement signing by Thailand and her counterparts from EuP. Then, the interviews with manufacturing firms have been conducted to confirm the estimated results. The results show that Thai industry can adjust itself under the EuP policy by seeking the newer market to avoid the adverse effects.



**F542 Troubled Waters? Pollution, Legislation and Child Mortality in India**

*Quy-Toan Do, The World Bank; Shareen Joshi, Georgetown University; Samuel Stolper, Harvard University*

India's rivers are heavily polluted. One of the most polluted sites is the river Ganges as it runs through the city of Kanpur. The river receives large amounts of toxic waste from the city's domestic and industrial sectors. The tannery industry in particular, unleashes highly toxic pollutants into the river. We study the impact of a landmark piece of environmental legislation in this city. *M C Mehta v Union of India* ordered the tanneries to either clean its waste or shut down. The local municipality was required to clean city sewers and reduce the level of water pollution. We explore the mortality burden of this ruling in Kanpur district as well as districts downstream. We find a decline in Kanpur's rate of infant mortality immediately after the verdict. The decline in mortality also extends downstream. To explore the extent to which river pollution may affect children's mortality, we expand our sample to the set of all Indian districts with major rivers. Since pollution may be endogenous, we construct an instrument for water quality using water quality upstream of that district. Two-stage least squares (2SLS) regression reveals a positive district-level association between one-month infant mortality and the concentration of fecal coliforms in river water. This association strongly holds for both national demographic surveys that we use to compile infant mortality data. We interpret the association to be causal: The average effect of a one-percent increase in fecal coliforms is an additional 3-5 deaths per 100,000 births in a given month. In comparison, the corresponding downstream infant mortality impact is approximately 1-2 deaths per 100,000 births.

Support

**FRI  
0430 pm**

**F299 Energy Consumption, Human Capital and Economic Growth in Singapore**

*Zheng Fang, Nanyang Technological University; Youngho Chang, Nanyang Technological University*

This paper examines causal relationship between energy consumption, human capital and GDP in Singapore over a period of 1965-2011 using the aggregate production function that considers physical capital, labor, human capital and energy. The relationship between energy consumption and economic growth, or the relationship between human capital and economic growth has been well studied but the dynamic relationship of all these variables is not well studied. Energy and human capital appears to be critical variables in the cointegration space as much as conventional inputs of physical capital and labor. A unidirectional Granger causality running from GDP to energy appears to exist in Singapore, which means reducing energy consumption will have little impact on economic growth and therefore energy conservation policies could be implemented to ensure economic growth. Human capital also appears to Granger-cause energy consumption in the long-run, which implies that more investment on the human capital associated with the research and development of new energy-efficient technologies and awareness education on the importance of environment are needed for further economic growth in Singapore. The findings would give future directions for energy and human development policies in Singapore.

7 August 2015

0430pm to 0610pm

Ballroom III

**Session 8.8 Investment, Banking and Finance II**

**Session Chair** Shigeyuki Hamori, Kobe University

**F341 High Dimensional Non-Linear Interdependence and Portfolio Optimization**

*Shuairu Tian, Kobe University; Shigeyuki Hamori, Kobe University*

In this paper, we propose to capture both linear and non-linear interdependence between financial markets in high-dimension case. Its key contribution is twofold. First, we introduce Hierarchical Archimedean copula-rotated ARCH (HAC-RARCH) model. Second, we investigate the financial application of interdependence in risk management and portfolio optimization

**F471 Systemic Risk and Crisis Management: A CoVaR Approach**

*Katsutoshi Shimizu, Nagoya University*

This paper examines the effects of a regulator's crisis management on systemic risk as measured by the delta conditional value-at-risk (CoVaR) during the financial crisis in Japan. We evaluate the various management measures primarily in terms of their liquidity provision/capital infusion effects as well as adverse contagion effects. The findings of the study generally support evidence for the liquidity provision/capital infusion effect, but favor the adverse contagion effect for public fund injection programs with multiple recipients. In addition, the management restrictions accompanying injection programs or the moral hazard with failure resolution might have aggravated the systemic risk. Furthermore, although we confirm that the average systemic risk of the largest banks is higher than that of other banks, we do not necessarily observe the amplified effects of the former on the latter. Lastly, crisis management does not effectively work for the systemic tail risk.

**FRI  
0430 pm**

**F362 Distillation of News Flow into Analysis of Stock Reactions**

*Junni L. Zhang, Peking University; Wolfgang K. Hardle, Humboldt-University; Sim Kee Boon, Singapore Management University; Cathy Y. Chen, Chung Hua University; Elisabeth Bommers, Humboldt-University*

News carries information of market moves. The gargantuan plethora of opinions, facts and tweets on financial business offers the opportunity to test and analyze the influence of such text sources on future directions of stocks. It also creates though the necessity to distill via statistical technology the informative elements of this prodigious and indeed colossal data source. Using mixed text sources from professional platforms, blog fora and stock message boards we distill via different lexica sentiment variables. These are employed for an analysis of stock reactions: volatility, volume and returns. An increased (negative) sentiment will influence volatility as well as volume. This influence is contingent on the lexical projection and different across GICS sectors. Based on review articles on 100 S&P 500 constituents for the period of October 20, 2009 to October 13, 2014 we project into BL, MPQA, LM lexica and use the distilled sentiment variables to forecast individual stock indicators in a panel context. Exploiting different lexical projections, and using different stock reaction indicators we aim at answering the following research questions: (i) Are the lexica consistent in their analytic ability to produce stock reaction indicators, including volatility, detrended log trading volume and return? (ii) To which degree is there an asymmetric response given the sentiment scales (positive v.s. negative)? (iii) Are the news of high attention firms diffusing faster and result in more timely and efficient stock reaction? (iv) Is there a sector specific reaction from the distilled sentiment measures? We find there is significant incremental information in the distilled news flow. The three lexica though are not consistent in their analytic ability. Based on confidence bands an asymmetric, attention-specific and sector-specific response of stock reactions is diagnosed.

**F146 Implicit Guarantees, Agency Cost, and Shadow Banking**

*An Wang; University of Maryland*

Bank holding companies (BHCs) finance risky investment through deposit funding via their bank entities or securitization via special purpose vehicles (SPVs). To increase the size of investment and the price of asset-backed securities (ABSs), BHCs guarantee securitized assets with bank proceeds. As guarantees are implicit, the moral hazard of them not being realized creates an agency cost in securitization, analogous to the agency cost in deposit funding due to liquidation costs. The relative size of securitization agency cost determines the profitability of shadow banking. When monitoring cost is relatively small, BHCs securitize unmonitored illiquid assets that are subject to lower adverse selection and have low upside potentials, whereas monitored high-quality assets are kept on balance sheets. Securitization alters BHCs' asset ranking criteria, increases their total leverage, and changes the size and portfolio of their bank entities. When liquidation cost is sufficiently high, BHCs prioritize securitization over traditional bank lending, and consequently unmonitored low quality assets dominate the market. Reserves held on-balance sheet to execute guarantees increase the size of banks and their holding of safe assets, while the whole banking system is exposed to higher risks.

**F452 Efficiency on Southeast Asia Banking: Indonesia, Malaysia, Philippines and Thailand**

*Shazida Jan Mohd Khan, Universiti Utara Malaysia*

This paper uses the concept of meta-frontiers DEA to compare the technical efficiencies of banks in selected Southeast Asia countries in the period of 1998 – 2012. We evaluate bank efficiency in Indonesia, Malaysia, Thailand and the Philippines by means of Data Envelopment Analysis (DEA) and we employ a meta-frontiers approach to calculate efficiency scores in a cross country setting. Overall, the analysis shows that even there are some similarities in the process of financial reforms undertaken in the selected countries, the observed efficiency levels of banks vary substantially across the market. It is crucial to take into consideration of different technology in explaining the efficiency differences.

**FRI**  
**0430 pm**

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