

**SINGAPORE ECONOMIC
REVIEW**

C o n f e r e n c e 2 0 1 7

2 – 4 AUGUST 2017

SINGAPORE

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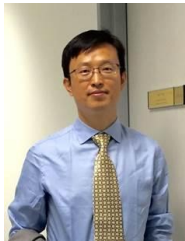
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Welcome Message by the SER Editor

2 August 2017

Dear SERC 2017 Participants,

I have great pleasure in welcoming you to the 2017 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 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 five highly visible conferences held in 2007, 2009, 2011, 2013 and 2015. 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 this time we have Professor Edward Lazear, former Chairman of the White House Council of Economic Advisers.

This year marks the 62nd 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 290 papers will be tabled for presentation to more than 300 participants from nearly 45 countries.

I am grateful for the financial support of the following sponsors: Nanyang Technological University (NTU), NTU Sustainable Earth Office, Monetary Authority of Singapore, Asian Development Bank Institute, 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 Singapore University of Social Sciences 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 2017 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

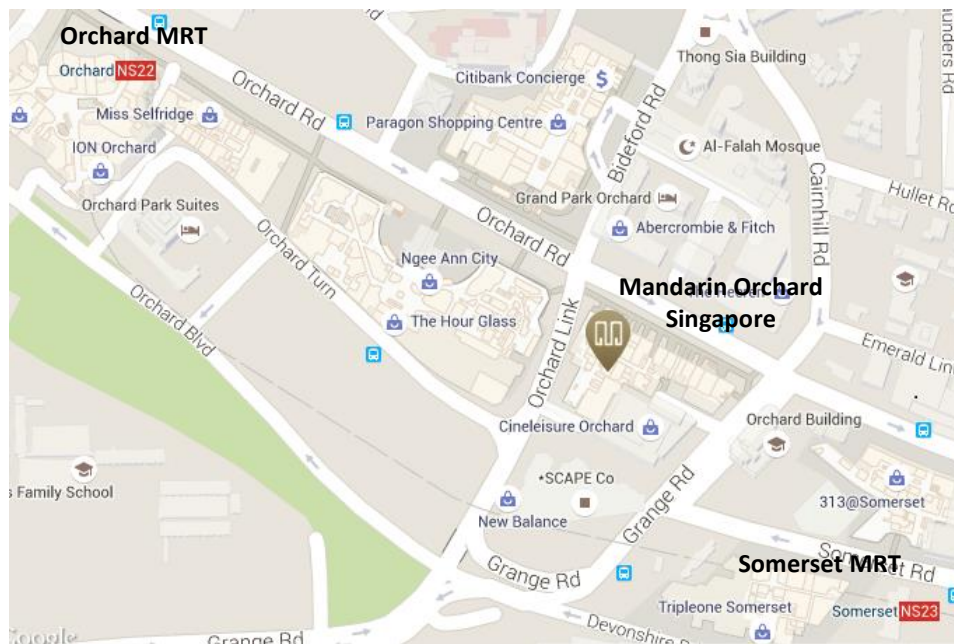
Mandarin Orchard Singapore is easily accessible. The nearest MRT station is *Somerset*. The hotel is accessible via hotel limousines, taxis, airport shuttle buses, trains and public buses from and to the Airport.

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

2 August 2017 (Wednesday) 0800 am - 0900 am at Mandarin Ballroom Foyer at Level 6 of the hotel.

3 – 4 August 2017 (Thursday - Friday) 0800 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 non-student paying participants only)

Date 2 August 2017 (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 4 August 2017 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 I at Level 6,

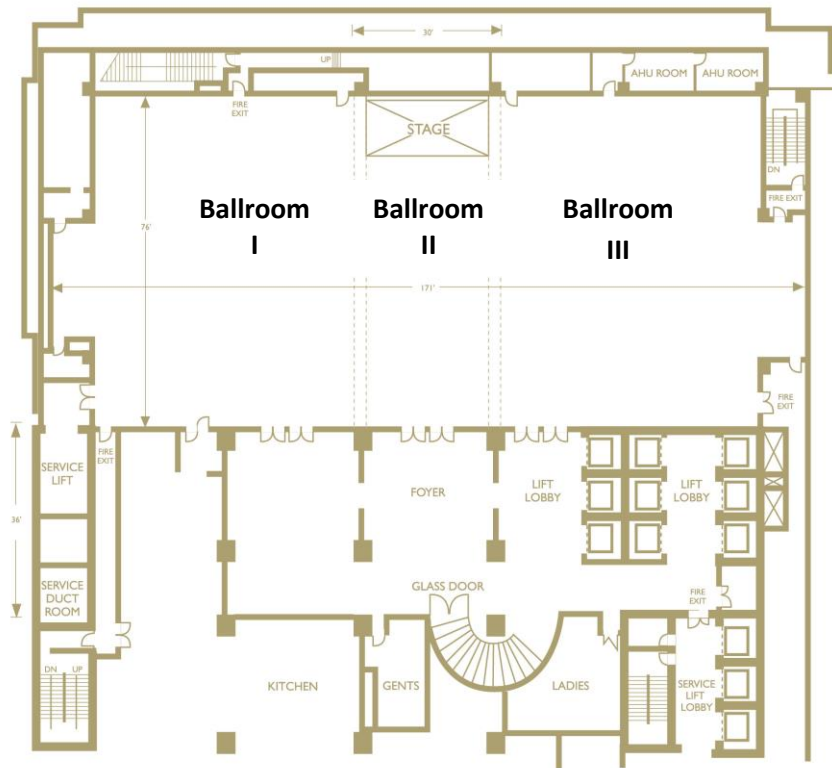
Grange Ballroom at Level 5,

Meeting Rooms 801- 805 at Level 8

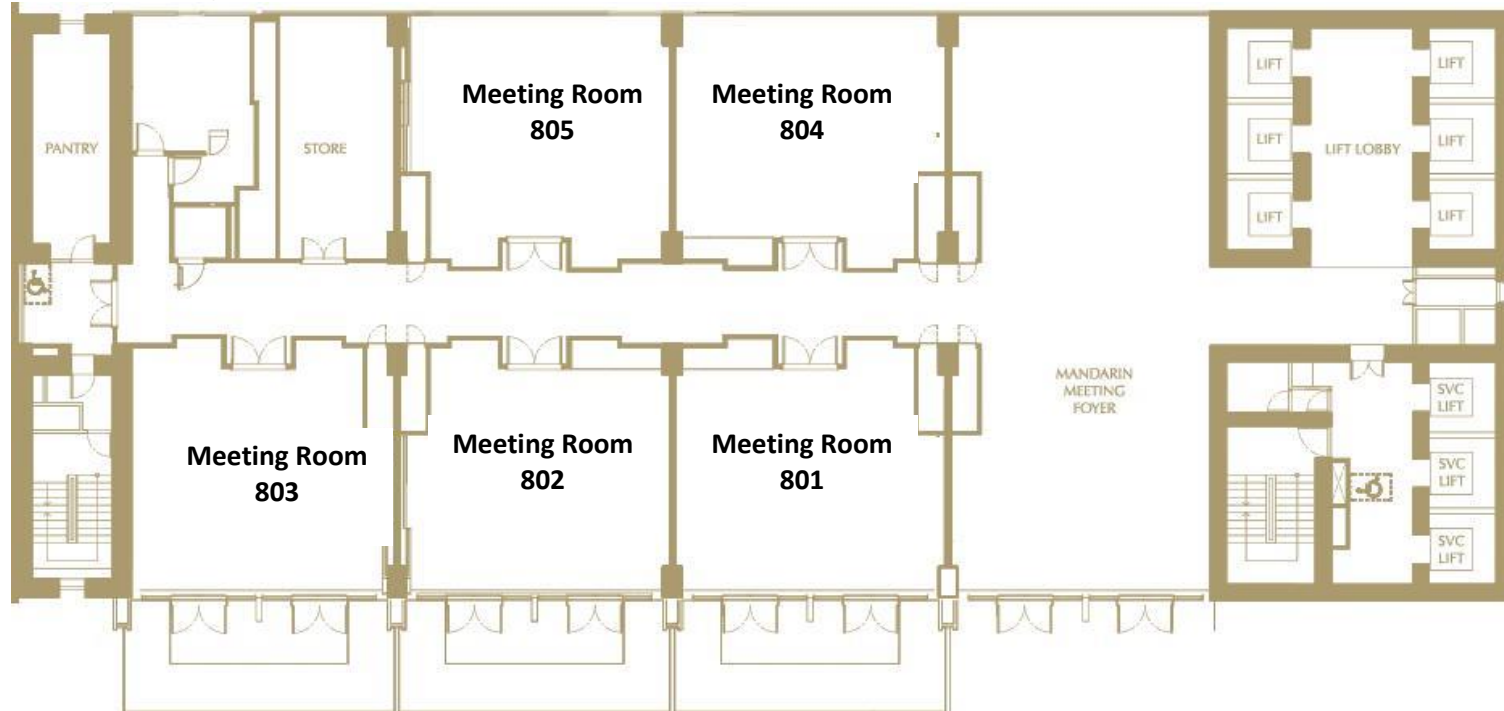
Meeting Room 607 at Level 6, Orchard Meeting Suite on Orchard Wing

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 801 and Session X.2 will be at Meeting Room 802.

Mandarin Ballrooms at Level 6



Mandarin Meeting Rooms at Level 8



Meeting Room 607, Level 6, Orchard Meeting Suite on Orchard Wing



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 2017 Programme Overview

2 August 2017	3 August 2017	4 August 2017
Wednesday	Thursday	Friday
0800 Registration	0800 Registration	0800 Registration
0900 (60min) Welcome Speech & Plenary Session 1: Keynote by Prof Edward Lazear	0830 (90min) Plenary Session 4: Monetary Authority of Singapore (MAS)	0830 (80min) Parallel Sessions 5
1000 (25min) Tea break	1000 (25min) Tea break	0950 (45min) Plenary Session 7: Tea Reception with Journal Editors
1025 (60min) Plenary Session 2: Globalization [+5min transition]	1025 (80min) Parallel Sessions 3 [+5min transition]	1035 (80min) Parallel Sessions 6 [+5min transition]
1130 (80min) Parallel Sessions 1	1150 (60min) Special Sessions II	1200 (60min) Special Sessions III
1250 (60min) Lunch	1250 (60min) Lunch	1300 (60min) Lunch
1350 (90min) Plenary Session 3: Sustainable Earth Office	1350 (90min) Plenary Session 5: Asian Development Bank Institute (ADBI)	1400 (80min) Parallel Sessions 7
1520 (25min) Tea break	1520 (30min) Tea & RCNG	1520 (25min) Tea break
1545 (60min) Special Sessions I [+5min transition]	1550 (60min) Plenary Session 6: Next Age Institute (NAI) [+5min transition]	1545 (80min) Parallel Sessions 8
1650 (60min) Parallel Sessions 2	1655 (80min) Parallel Sessions 4	1705 End
1750 End	1815 End	
1900 (180min) Conference Dinner, Guest of Honour: Minister Heng Swee Keat		

Plenary Sessions

1 Opening and Keynote Speech Aug 2 Wed 9.00am

Conference Opening: Euston Quah (Nanyang Technological University)

Keynote: Edward Lazear (Stanford University)

Topic: How Economics Can Effectively Influence Government Policy: A Recent White House Example

Much of economic research is rich in policy implications. How best can economists put their ideas into practice? A recent example of a typical policy briefing on the labor markets, the global economy and tax policy will be provided.

Bio:

Edward Lazear

Davies Family Professor of Economics, Graduate School of Business, Stanford University
Morris Arnold and Nona Jean Cox Senior Fellow, Hoover Institution, Stanford University
Edward P. Lazear, the Morris A. and Nona Jean Cox Senior Fellow at the Hoover Institution since 1985, is also the Davies Family Professor of Economics at Stanford University's Graduate School of Business, where he has taught since 1992. Professor Lazear taught previously at the University of Chicago's Economics Department and Graduate School of Business, where he was the Brown Professor of Urban and Labor Economics. Lazear was Chairman of the President's Council of Economic Advisers and served at the White House, on leave from Stanford, from 2006 to 2009. In his position as the chief economic advisor to the President, he advised on a broad range of matters that involve both the macroeconomy and microeconomic issues. Founding Editor of the *Journal of Labor Economics*, Lazear is a Fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Sciences, the Econometric Society, and the Society of Labor Economists of which he was president. Lazear is a Visiting Distinguished Fellow of the Becker Friedman Institute at the University of Chicago and is heads the economics initiative at the George W. Bush Institute. He is also a Research Associate of the National Bureau of Economic Research, where he co-chairs the program in personnel economics. Professor Lazear has written extensively on labor markets and personnel issues; microeconomic theory; issues involving worker compensation and effects on productivity; entrepreneurship; governmental policies on discrimination, affirmative action, and comparable worth; educational policy; unemployment; culture, language, and diversity issues; the doctrine of employment at will; distribution of income within the household; pricing and marketing policies; and other issues involving labor markets and the macroeconomy. He has over 100 published academic articles, he is a frequent contributor to the popular press, and has written or edited twelve books. Professor Lazear's book *Personnel Economics* (MIT Press, 1995) expands on his 1993 Wicksell Lectures. In 1998, he received the Melamed Prize, which cited this book as

the best research by a business school professor anywhere in the world during the previous two years. He received the Distinguished Teaching Award from Stanford University's Graduate School of Business, the PhD Faculty Distinguished Service Award, and the Davis Prize for Lifetime Achievement. Lazear won the IZA Prize in Labor Economics, which is given to the person viewed to have made the most significant contributions to labor economics in the world. This was primarily for his work in personnel economics. In June 2006, Lazear was awarded the Jacob Mincer Prize given by the Society of Labor Economics for lifetime contributions to the field. He holds four honorary doctorates.

In addition to his former duties in Washington, Professor Lazear has been an advisor to the governments of Czechoslovakia, Romania, Russia, Ukraine, and Georgia. Born in 1948, Professor Lazear grew up in Los Altos, California. He received his AB and AM degrees from the University of California at Los Angeles, and his PhD from Harvard University in economics.

2 Globalization Session Aug 2 Wed 10.25am

Chair: Euston Quah (Nanyang Technological University)

Eminent Panelists: Justin Lin (Peking University); Joergen Moeller (Copenhagen Business School); JongWha-Lee (Korea University); Charles Yuji Horioka (Asian Growth Research Insitute)

Session Topic: Globalization: Where is it headed?

3 Sustainable Earth Office Session Aug 2 Wed 1.50pm

Chair: Alexander Zehnder, Committee Chairman for Sustainable Earth Peak of Excellence

Eminent Panelists: Jinhua Zhao (Michigan State University); Parkash Chander (Jindal School of Government and Public Policy); Renate Schubert (ETH Zurich); Yasuyuki Sawada (ADBI)

4 Monetary Authority of Singapore (MAS) session Aug 3 Thu 8.30am

Chair: Peter Wilson

Eminent Panelists: Takatoshi Ito (Columbia University); Ahmet Faruk Aysan (Istanbul Sehir University); Koichi Hamada (Yale University); Naoyuki Yoshino (ADBI); Ramkishan Rajan (LKYPP)

Session Topic: The Global Financial Crisis Ten Years On: Whither Monetary Policy?

Almost a decade on from the 2008/09 financial debacle, “green shoots” is sprouting up in the global economy. The world has averted the spectre of deflation and unconventional monetary policies are being slowly rolled back, alongside a synchronous recovery in the major regions. Yet this apparent return to normality is taking place amid uncertainty over the sustainability of the rebound, as well as heightened economic policy risks globally. In Asia, the aftermath of the global financial crisis and volatile capital flows have hugely complicated monetary management and led to large currency swings. As we prepare to enter a new phase of growth accompanied by a pickup in inflation, this may be an opportune time for policymakers in the region to consider how the design of their monetary and exchange rate systems can be strengthened.

5 Asian Development Bank Institute (ADBI) Session Aug 3 Thu 1.50pm

Chair: Naoyuki Yoshino, Dean, ADBI

Session Topic: Infrastructure Investment in Asia

Naoyuki Yoshino, Dean, ADBI

Using spillovers to finance infrastructure (Keynote speech)

Yasuyuki Sawada, Chief Economist

ADB Asia's Infrastructure Investment Needs, 2016-2030

Abdul Abiad, Economic Advisor, ERCD, ADB

The Evolution and Impact of Infrastructure in Middle-income Countries

Vivek Rao, Principal Financial Sector Specialist, SARD, ADB

Factors Influencing Project Financing by Banks of Infrastructure PPP Projects in Asia

6 Next Age Institute (NAI) session Aug 3 Thu 3.50pm

Chair: Ngee Choon Chia, Co-Director, Next Age Institute

Session Topic: Aging Research: Methodology and Issues

Ngee Choon Chia, Next Age Institute and Department of Economics, National University of Singapore

Using Stochastic Health State Function to Forecast Healthcare Demand and Healthcare Financing: Evidence from Singapore

Budgeting healthcare financing for an ageing population requires projections on healthcare demand and cost. However, detailed micro health data is often unavailable. Projection of

healthcare demand is thus usually based on projected elderly population, which does not take into consideration changes in health state. This paper proposes a new approach to forecast health variables with a stochastic health state function and the well-established Lee-Carter stochastic mortality model, using life tables, hospital admission and cost patterns by age bands. We thus use Singapore's life tables and hospital admission data to project the hospitalization rate, healthcare demand and healthcare financing cost. The model's projection on national hospital insurance claims for 2013 is consistent with the available data on Medishield in 2013.

Vaithianathan R., B. Hool, M. Hurd and S. Rohwedder, Centre for Research on the Economics of Ageing, Singapore Management University

High Frequency Internet Survey of a Probability Sample of Older Singaporeans: The Singapore Life Panel

Facing a rapidly ageing population, Singapore is presented with urgent policy challenges. Yet there is very little economic data on the circumstances of older Singaporeans. In response, the Centre for Research on the Economics of Ageing (CREA) at Singapore Management University has been collecting monthly data on a panel of Singaporeans aged between 50 to 70 years. We detail the methodology by which the Singapore Life Panel® (SLP) was constructed using a population-representative sampling frame from the Singapore Department of Statistics. Contact was made with 25,000 households through postal, phone and in-person canvassing. 15,200 respondents from 11,500 households enrolled in the panel. Comparisons between SLP and official statistics show close matching on age, sex, marital status, ethnicity, education, labour force status, income and expenditure. This suggests that the panel is representative of Singapore's elderly population. Monthly surveys continue to be administered over the internet, supplemented by phone and in-person outreach to ensure the panel remains reliable for use in policy-making, and response rates are remarkably stable at over 8,000 per month. The SLP contains rich data on demographics, health status, socioeconomic indicators, contact with government programmes, and subjective perceptions and is likely to be a key resource for economic research into ageing in Singapore.

Charles Yuji Horioka, Asian Growth Research Institute

Ageing and Bequests: Do People Leave Bequests, and If So, Why and Does It Matter?

In this paper, I will survey the literature on the significance of bequests in wealth holdings, why people leave bequests, and why it matters. In Part I, I will survey the literature on the quantitative importance of bequests and other intergenerational transfers spawned by the seminal paper by Kotlikoff and Summers (1981). In Part II, I will survey the theoretical and empirical literature on the reasons why people leave bequests and other intergenerational transfers, focusing on altruistic, strategic or exchange, "warm glow" or "joy of giving," and capitalist motives, and discuss some of my own recent work in the context of this literature. In Part III, I will consider the implications of my and others' findings for such policy issues as the effectiveness of fiscal policy in stimulating the economy and the intergenerational

persistence of wealth disparities.

7 Tea Reception with Journal editors

Aug 4 Fri 9.50am

Editors:

Harald Uhlig (University of Chicago)
Cheng Hsiao (University of Southern California)
John Rust (University of Georgetown)
Takatoshi Ito (Columbia University)
Jinhua Zhao (Michigan State University)
William S. Neilson (University of Tennessee)
Erik Snowberg (University of British Columbia)
John Strauss (University of Southern California)
Kwanho Shin (Korea University)
Charles Yuji Horioka (Asian Growth Research Institute)

Schedule of Parallel Sessions

Parallel Sessions 1		Parallel Sessions 2	
Aug 2 Wed 1130		Aug 2 Wed 1650	
1.1	Econometrics I	2.1	Economic History
1.2	Macroeconomics I	2.2	Econometrics II
1.3	Behavioral I	2.3	Financial II
1.4	Financial I	2.4	Public I
1.5	Environmental I	2.5	ADB I organized
1.6	Education & Health I	2.6	-
1.7	Singapore I	2.7	-
1.8	Political Economy	2.8	Microeconomics I
Parallel Sessions 3		Parallel Sessions 4	
Aug 3 Thu 1025		Aug 3 Thu 1655	
3.1	International I	4.1	International II
3.2	Microeconomics II	4.2	Macroeconomics III
3.3	Chinese Economy I	4.3	Behavioral II
3.4	Financial III	4.4	Financial IV
3.5	Public II	4.5	Labor I
3.6	Asian I	4.6	Education & Health II
3.7	ASEAN I	4.7	ASEAN II
3.8	Macroeconomics II	4.8	Development and Growth

- Parallel Sessions 5**
Aug 4 Fri 0830
- 5.1 Econometrics III
 - 5.2 Microeconomics III
 - 5.3 Labor II
 - 5.4 Financial V
 - 5.5 Public III
 - 5.6 Asian II
 - 5.7 Singapore II
 - 5.8 International III

- Parallel Sessions 7**
Aug 4 Fri 1400
- 7.1 International V
 - 7.2 Microeconomics IV
 - 7.3 Labor III
 - 7.4 Financial VII
 - 7.5 Environmental II
 - 7.6 Asian IV
 - 7.7 Innovation
 - 7.8 ASEAN IV

- Parallel Sessions 6**
Aug 4 Fri 1035
- 6.1 International IV
 - 6.2 Macroeconomics IV
 - 6.3 Behavioral III
 - 6.4 Financial VI
 - 6.5 Chinese Economy II
 - 6.6 Education & Health III
 - 6.7 ASEAN III
 - 6.8 Asian III

- Parallel Sessions 8**
Aug 4 Fri 1545
- 8.1 Econometrics IV
 - 8.2 Macroeconomics V
 - 8.3 Industry
 - 8.4 Financial VIII
 - 8.5 Public IV
 - 8.6 Education & Health IV
 - 8.7 ASEAN V
 - 8.8 Labor IV

Special Sessions

Special Sessions I Aug 2 Wed 1545 to 1645

- Special 1.1 Development and Growth Grange Ballroom
- Special 1.2 Financial Crisis Room 802

Special 1.3	Environmental	Room 803
Special 1.4	International	Room 804
Special 1.5	Public Policy and Welfare	Room 805

Special Sessions II Aug 3 Thurs 1150-1250

Special 2.1	Public Policy and Welfare	Grange	Ballroom
Special 2.2	Microeconomics	Room 801	
Special 2.3	Economic History	Room 802	
Special 2.4	Employment and Social Security	Room 803	
Special 2.5	Banking	Room 804	
Special 2.6	Finance	Room 805	

Special Sessions III Aug 4 Fri 1200-1300

Special 3.1	Environmental	Grange	Ballroom
Special 3.2	Econometrics	Room 801	
Special 3.3	Behaviorial	Room 802	
Special 3.4	Growth and Trade	Room 803	
Special 3.5	Markets	Room 804	

FULL PROGRAMME
(Abstracts start on Page 69)

Parallel Sessions 1 Aug 2 Wed 1130

1.1	Econometrics I	Room 801
1.2	Macroeconomics I	Grange Ballroom
1.3	Behavioral I	Room 802
1.4	Financial I	Mandarin Ballroom I
1.5	Environmental I	Room 803
1.6	Education & Health I	Room 804
1.7	Singapore I	Room 805
1.8	Political Economy	Room 607

Econometrics I - Panel Data

Cheng Hsiao

Andrew Pua

Should We Use IV To Estimate Dynamic Linear Probability Models With Fixed Effects?

Cynthia Yang

Identification And Estimation Of Spatial Autoregressive Models With Common Factors

Isamu Ginama

Mobility and Volatility in International Capital Transfers

Qu Feng

Structural Changes in Heterogeneous Panels with Endogenous Regressors

Macroeconomics I - Monetary I

Naoyuki Yoshino

Kozo Ueda

Reallocation Effects Of Monetary Policy

Paul McNeils

Monetary Rules And Policy Targets At The PBoC: Welfare Vs. External Balance?

Kashiwagi Masanori

A Vehicle Currency Country's Welfare Under Optimal Monetary Policy

Masahiko Tsutsumi

A Sovereign Wealth Fund For A Non-oil Producing Country: The Case Of Japan

Behavioral I - Strategic Choice

Erik Snowberg

Tetsuya Kawamura

Investigating The Simultaneous Effect Of Aging And The Cognitive Ability On Donating Behavior: Evidence From The Experimental Dictator Games

Jaimie Lien

The Value Of The Knowledge Of Others

Jaesun Lee

How Does Competition Affect People Economically And Emotionally?

Jonathan Tan

Racing Towards a Finishing Line: A Laboratory Experiment

Financial I - Markets I

Youngho Chang

Shigeyuki Hamori

Interdependence Between Oil And East Asian Stock Markets: Evidence From Wavelet Coherence Analysis

Xiao Jing Cai

Modelling interdependence between East Asian stock markets and the prices of oil and gold: a wavelet based approach

Marc Bohmann

Informed Trading In Commodity Derivatives Around News Announcements

Hidenobu Okuda

Fund Raising Behaviors In A Highly Dollarized Developing Economy: Estimating The Determinants Of Capital Structure Of Cambodian Firms

Environmental I - Pollution

Jinhua Zhao

Jonathan Van Der Kamp

Social Cost-benefit Analysis Of Air Pollution Control Measures ? Advanced Assessment Of Industrial Point Emission Sources

Mengmeng Guo
Running With A Mask? The Effect Of Air Pollution On Marathon Runners'
Performance

Pin Ng
Environment, Resources And Ecology-an Empirical Study Based On 27 Coal
Resource-based Cities In China

Shahbaz Muhammad
Globalization-Emissions Nexus: Testing the EKC hypothesis in Next-11
Countries

Education and Health I - Educational Effects

Tomoki Fujii

Kelvin Seah
Immigrant Educators And Students' Academic Achievement

Luca Facchinello
Does Peer Ability Affect Education Choices?

Yi-Cheng Kao
Rational Phd Glut

Yuan Hu
Sex Ratios And Divorce: Evidence From China

Singapore I - Pension and Health

Stanislav E. Shmelev

Chen Yanying and Tan Yijin
Income and subjective well-being: Evidence from Singapore's first national non-
contributory pension

Chew Soon Beng
The Role of Singapore Employer's Central Provident Fund Contribution Rates
as an Economic Restructuring Tool

Ong Qiyang

Does Improved Cognitive Functioning Reduce Poverty? Evidence From a Field Experiment on Debt Relief

Maitreyee Mukherjee

Effects Of Weather On Seasonal Patterns Of Hand Foot Mouth Disease In Singapore

Political Economy

John Ham

Yan Jun Li

Good Bye, Chiang Kai-shek? Long-lasting Effects Of An Autocratic Regime

Hiroaki Hayakawa

Socio-cultural Evolution, Institutionalized Dispositions, And Rational Expressive Behavior

Rintaro Yamaguchi

Corruption, Institutions, And Sustainable Development: Theory And Evidence From Inclusive Wealth

Jiankun Lu

Signal and Political Accountability: Environmental Petitions in China

Special Sessions I

Aug 2 Wed 1545 to 1645

Special 1.1 Development and Growth Grange Ballroom

Bernard Yeung

Justin Lin

Development Ideas and Development Performance: A New Structural Perspective

Jong-Wha Lee

Convergence Success and the Middle-Income Trap

Special 1.2 Financial Crisis Room 802

Basant Kapur

Harald Uhlig

Mortgage-Backed Securities and the Financial Crisis of 2008: a Post Mortem

Takatoshi Ito

EM Asian Growth and Financial Stability: Twenty Years after the Asian Financial Crisis

Special 1.3 Environmental Room 803

Fuhai Hong

Jinhua Zhao

Aggregate Emission Intensity Targets: Applications to the Paris Agreement

Renate Schubert

Distributional Effects of Green Electricity Defaults

Special 1.4 International Room 804

Koichi Hamada

Wing Thye Woo

International Economic Architecture in a Multi-Polar World

Larry Dongxiao Qiu

Joint Venture Choice, Market Share Rivalry, and Spillovers: Evidence from China

Special 1.5 Public Policy and Welfare Room 805

Chew Soon Beng

Lars Lefgren
Self-Harm as an Optimal Distraction

Lim Chong Yah
Full Employment, Unemployment, and Public Policy

Parallel Sessions 2	Aug 2 Wed 1650	
2.1	Economic History	Room 805
2.2	Econometrics II	Room 804
2.3	Financial II	Grange Ballroom
2.4	Public I	Room 803
2.5	ADBI organized	Room 802
2.6	-	Room 801
2.7	-	Mandarin Ballroom I
2.8	Microeconomics I	Room 607

Economic History

Malcolm Rutherford

Lin Zhang

The Macroeconomic Trade Effects Of Vehicle Currencies: Evidence From 19th China

Dan Li

Reputation Building Of A Nascent Government In Debt Financing: lessons From The Bond Market In China, 1912-37

Ichiro Sugimoto

Methodology Of Deriving The Annual Opium Consumption In The Colony Of Singapore And Its Impact To Government Revenue Earnings And Portfolio-financial Investment

Econometrics II - Time Series

Low Chan Kee

Kai Yin Woo

Testing for Cointegration of PPP: Evidence from China and her Asian trading partners along the 'One Belt One Road' routes

Cindy S H Wang

New Solutions Of The Imbalance Regressions With Their Applications To Two Finance Puzzles

Chung Yan Sam

Bootstrapping The Autoregressive Distributed Lag Test For Cointegration

Financial II - Financial Crisis

Takatoshi Ito

Adem Baltaci
Impact of Cultural Values on Financial Crises: An Empirical Investigation

Omar Bashar
Cross-country Differences In The Impacts Of The Global Financial Crisis: Were
Resource-rich Countries Hurt Less Than Others?

Viet Nguyen
What's Mine is Yours: Sovereign Risk Transmission during the European Debt
Crisis

Public I - Taxes and Transfers

Giovanni Ko

Masatoshi Jinno
Calculating The Net Benefit Of Admitting Immigrant Under The Defined-return-
ratio Pay-as-you-go Pension System

Kim Heng Tan
Optimal Social Security: A Dollar is Not a Dollar in Income Transfers

Hirofumi Kurokawa
A Choice Experiment On Taxes: Are Income And Consumption Taxes
Equivalent?

ADB I Organized session

Naoyuki Yoshino

Naoyuki Yoshino
Determinants and Impacts of Financial Literacy in Japan

Peter Morgan
Mortgage Lending, Banking Crises and Financial Stability in Asia

Bihong Huang
Housing Market and Government Regulation: Evidence from China's Home
Purchase Restriction Policy

Microeconomics I

Kaiwen Leong

Andreas Knorr
Big Data, Customer Relationship and Revenue Management in the Airline: What
Future Role for Frequent Flyer Programs?

Haifeng Fu

Pure Strategy Equilibria and Some Refinements in Games with Public and Private Information

Aloysius Siow

How Organization Design affects Fairness and Efficiency in Bargaining

Parallel Sessions 3	Aug 3 Thu 10.25am	
3.1	International I	Grange Ballroom
3.2	Microeconomics II	Room 801
3.3	Chinese Economy I	Room 802
3.4	Financial III	Mandarin Ballroom I
3.5	Public II	Room 803
3.6	Asian I	Room 804
3.7	ASEAN I	Room 805
3.8	Macroeconomics II	Room 607

International I - Labor & Trade

Larry Qiu

Yukio Karasawa-Ohtashiro

Host Country's Fdi Regulations, Multinational Enterprises' Entry Strategies, And Mixed Markets

Chul-Woo Kwon

Offshoring, The Threat Effect, And Wage Inequality

DP Priyadarshi Joshi

Trade, Employment And Productivity Nexus: An Examination In Post Reforms India

Yang Xu

Structural Change and Skill Premium in a Quantitative Model of Trade

Microeconomics II - Information and Property Rights

Yuk-Fai Fong

Soo Jin Kim

Privacy, Information Acquisition, And Market Competition

Dmitry Shapiro
Voluntary Disclosure of Negative Information and Its Effect on Competition

Yuta Inoue
Limited Consideration And Limited Data

Pak Hung Au
Objective and Subjective Indicators in Interim Performance Evaluations

Chinese Economy I - Industry

Justin Lin

Xiaoping Chen
FDI and Firm Innovation

Guiying Laura Wu
Estimating Productivity of Public Infrastructure Investment

Xiangjun Ma
Labor Skill, Industry Structure and Migration

Henry Wan
Industrial Policy: Chinese Debate and Taiwan's Foundries

Financial III - Information and Uncertainty

Harald Uhlig

Amit Mittal
Private Information Implications For Acquirers And Targets

Harold Glenn Valera
Gender, Technological Innovation In Agriculture, Risk Tolerance And Credit

Utilization

Siong Hook Law
The Effect Of Transparency On Financial Development

Anders Johansson
Political Uncertainty And Innovation In China

Public II - Taxes

Chung Mo Koo

Kazuki Hiraga and Kengo Nutahara
Can The Laffer Curve For Consumption Tax Be Hump-shaped?

Rodney Tyers
Automation And Inequality With Taxes And Transfers

Ismail Baydur
Vat Treatment Of The Financial Services: Implications for The Real Economy

Min Shi
Export Decision, Tax Rebates And Wage: Evidence From Chinese Manufacturing Firms

Asian I - Money, Banking & Finance I

Mehmet Bilgin

Takeshi Inoue
Has Financial Inclusion Contributed to Poverty Reduction in India? Empirical Analysis using State and Bank Group-wise Panel Data

Abid Aman Burki & Rashid Memon
Does Repeated Borrowing Help Explain The Impact Of Microfinance? New Evidence From Pakistan

Yuswanth Nuthalapati

Impact Of Microfinance, Government Policies And Women Empowerment On Economy: Evidence From India

Subash Sasidharan

Does Gender Of The Owner Matter For Firm's access To Formal Credit? Evidence From Small Firms In India

ASEAN I - Macro

Yasuyuki Sawada

Thi Mai Lien Dau and Yuthana Sethapramote

Measuring Fiscal And Monetary Policies Spillovers In ASEAN

Akhand Akhtar Hossain and Mala Raghavan

External Shocks, Inflation Volatility And Macroeconomic Fluctuations: Evidence From Indonesia And Thailand

Vimut Vanitcharoenthum

Business Cycle Accounting For Thailand

Monthien Satimanon

The Asymmetric Effects of Oil Price Shocks on Thai Stock Market

Macroeconomics II - International

Teck Yong Tan

David Meenagh

A Long-commodity-cycle Model Of The World Economy Over A Century And A Half - Making Bricks With Little Straw

Eu Chye Tan

Informal Sector And National Economic Resilience

Kabir Hassan

How big is FX liquidity premium?

Kiyotaka Sato

Exchange Rate Pass-through In Production Chains: Application Of Input-output

Analysis

Special Sessions II **Aug 3 Thurs 1150-1250**

Special 2.1 **Public Policy and Welfare** **Grange Ballroom**
Bryce Hool

Koichi Hamada
Analytical Bases of Abenomics

Ali Khan
Welfare Economics and Cost-benefit Analysis in the Small using the Money
Metric

Special 2.2 **Microeconomics** **Room 801**
Julian Wright

William S. Neilson
Equilibrium Vaccination Patterns in Asymmetric Networks

Yuk-fai Fong
Agent Information Acquisition And Utilization In Relational Contracts

Special 2.3 **Economic History** **Room 802**
Chia Siow Yue

Malcolm Rutherford
Market Deficiencies: From Veblen to Akerlof and Shiller

Masami Kita
British (Scottish) Influence Of Technology And Business To China And Japan
After India In 19th Century

Special 2.4 **Employment and Social Security** **Room 803**
James Ang

Partha Sen
Social Security and Delayed Retirement: A Two-Sector Model

John Strauss
Gender and Socio-economic Gradients of Cognition Measures: New Evidence
from Indonesia

Special 2.5 **Banking** **Room 804**
Leslie Teo

Ahmet Faruk Aysan

Fortuning the small and the plenty: Islamic banking for small and medium-sized enterprises

Kwanho Shin

A Contagion through Exposures to Foreign Banks during the Global Financial Crisis

Special 2.6 Finance Room 805

Shigeyuki Hamori

Ramo Gencay

Economic Links and Return Volatility

Naoyuki Yoshino

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

Parallel Sessions 4	Aug 3 Thu 1655	
4.1	International II	Grange Ballroom
4.2	Macroeconomics III	Room 801
4.3	Behavioral II	Room 802
4.4	Financial IV	Mandarin Ballroom I
4.5	Labor I	Room 803
4.6	Education & Health II	Room 804
4.7	ASEAN II	Room 805
4.8	Development Growth	and Room 607

International II - Trade Networks

Xiaoping Chen

Chin-Ho Lin

Does Asian fragmentation matter for the extensive margin of international trade in machinery production networks?

Han Lim and Boon Hwa Tng

Global Value Chains and the Exchange Rate Elasticity of Exports

Jingyun Gao and Shumei Chen

China's Belt And Road Initiative And The Asia-pacific Economic Integration: From The Perspective Of Transportation Infrastructure Connectivity

Dapeng Cai

Greenfield, Merger And Acquisition, Or Export? Regulating The Entry Of Multinational Enterprises To A Host-country Market

Macroeconomics III - Monetary II

Kim Heng Tan

Che Cheong Poon

The Applicability Of Fisher Equation Of Interest Rates To Explain The Relationship Between Nominal Interest Rate And Expected Inflation Rate In Hong Kong

Kian Teng Kwek

If Negative Real Rates Are Natural, are Negative Nominal Rates Unnatural?

Marc Nueckles

Structural Reforms, Financial Acceleration, And Unconventional Monetary Policy

Quan Yang

Swap Agreement And Liquidity Shock -- test The Magnitude Of Swap Agreement For the "One Belt And One Road" Countries

Behavioral Economics II - Individual Choice

Erik Snowberg

Songfa Zhong

Intertemporal Consumption with Risk: A Revealed Preference Analysis

Yan Wang

Persuading Buyers to Embrace Socially Responsible Act: an Experimental Investigation

Jie Zheng

How Does Time Scarcity Influence Individual Performance In A Multi-tasking Context

Phaik Nie Chin

The Effect Of Traders' Cognitive Biases On Psychological Attributes And Confidence In Stock Trading: An Experimental Study

Financial IV - Risk, Assets and Insurance

Kwanho Shin

Naoyuki Ishimura

A Modelling Approach To The Insurance Policy Design For The Risk Of

Epidemic Outbreaks

Yulin Liu

Optimal Contracts And Portfolio Performance Of Basic Endowment Insurance
In China

Yiyi Liu

The Logic Behind Application Of Asset Backed Securities In Public Private
Partnerships

Labor I - Work and Wages

John Strauss

Tien Manh Vu and Hiroyuki Yamada

Convergence Of Public And Private Enterprise Wages In A Transition
Economy: Evidence From A Distributional Decomposition In Vietnam, 2002-
2014

Hao-Chung Li

The Effects Of Global Competition From China On Taiwanese Labor Market

Debasmita Basak

Union bargaining power and product innovation: relevance of the preference
function

Kunio Tsuyuhara

Making Do With Less? Workers' On-the-job Effort And The Role Of Macro
Effects.

Education and Health II - Determinants of Health

Jongsay Yong

Kazuya Masuda

Breaking The Intergenerational Transmission Of The Poor Health? Maternal Education Effects On Private Health Investment And Child Health : Evidence From Natural Experiment In Benin

Piyachart Phiromswad
Searching For The Empirical Linkages Between National Health And Economic Growth

Margeret Triyana
Scarring Versus Selective Mortality: The Long-term Effects Of Early Life Exposure To Natural Disasters In The Philippines

Muhammad Nasir
Prenatal Exposure to Shocks and Early-life Health: Impact of Terrorism and Flood on Birth and Pregnancy Outcomes in Pakistan

ASEAN II - Households and Institutions

Ahmet Faruk Aysan

Sawarai Boonyamanond
Family Power And Its Role In Economic Sustainability Of The Thai Households

Chayanee Chawanote
Vietnam Structural Transformation: the Role of Local Institutions on Nonfarm Businesses

Daiju Aiba
Foreign Currency Borrowing And Risk-hedging Behaviors: Evidence From Household Survey In Cambodia

Mayang Arum Anjar Rizky
Intergenerational Transmission Of Risk And Trust Preferences: Evidence From Indonesian Household Survey

Development & Growth

Kian Teng Kwek

Benjamin Montmartin
When Geography Matters For Growth: Market Inefficiencies And Public Policy Implications.

Donghyun Park
The Landscape Of Economic Growth: Do Middle Income Countries Differ?

Falguni Pattanaik/ Nitin Bisht
Economic Freedom And Human Development: a Cross Country Analysis

Elya Nabila Abdul Bahri
Does Too Much Finance Harm Growth?: pre And Post Global Crisis Analysis

Parallel Sessions 5	Aug 4 Fri 8.30am	
5.1	Econometrics III	Room 801
5.2	Microeconomics III	Room 802
5.3	Labor II	Room 803
5.4	Financial V	Mandarin Ballroom I
5.5	Public III	Grange Ballroom
5.6	Asian II	Room 804
5.7	Singapore II	Room 805
5.8	International III	Room 607

Econometrics III - Instrumental Variables

Isamu Ginama

Nicholas Sim

ALIVE

Lance Fisher

Combining Sign And Long-run Parametric Restrictions In A Weak Instrument Case: Monetary Policy And Exchange Rates

Jin-Young Choi

Semiparametric Estimator For Binary-outcome Sample Selection: Prejudice Matters In Election

Juan Lin

A Flexible Copula Specification Test Under Censorship

Microeconomics III - Work and Corruption

Parkash Chander

Teck Yong Tan

The Extrinsic Motivation of Freedom at Work

Yu Zheng
A Model of Tournament Incentives and Corruption

Fuhai Hong
Bureaucratism, Corruption, and Firms' Environmental Investment and Abatement

Shailu Singh
Patents And Market Value

Labor II - Country Studies I

Margeret Triyana

Ian Li
Vertical, Horizontal And Skills Mismatch In The Australian Graduate Labour Market

Saizi Xiao
Labor Market Returns To Education And Language Skills In Post-reform China: An Update

Jin Ho Kim
Minimum Wage And Women's Decision Making Power Within Households

Eric D Ramstetter
Foreign Workers, Foreign Multinationals, And Wages In Malaysia's Manufacturing Plants After Controlling For Occupation And Sex During The Mid-1990s

Financial V - Liquidity and Volatility

David Lee

Woon Kong Wong
Liquidity Variation And Stock Market Returns

Sanae Ohno
Systemic Liquidity Risk And Measurement Of Connectedness

Ros Zam Zam Sopian
Return, Volatility And Equity Fund Flows Linkages: Evidence From An Emerging Market

Ming-Guang Ma
A Comparative Analysis Of The Impacts Of Chinese And USA Stock Markets On World Markets

Public III - Equality and Wellbeing
Te Bao

Niroth Chhy
The Impacts Of Government Consumption On Efficiency, National Income, And Income Inequality

Chung Yee Liew
Inequality And Its Effect On Government Spending On Poverty Reduction In Asian Countries

Cheng Keat Tang
Do Speed Camera Save Lives?

Toshihiro Ihori
National Emergency, Security Spending, and Growth

Asian II - Money, Banking & Finance II
Filippo di Mauro

Kittipong Rueanthip
Financial Constraints And Investment-cash Flow Sensitivity: Evidence From Thai Micro And Small Enterprises

Xuan Vinh Vo
Herding by foreign investors on equity returns in Vietnam stock market

Prithvi Krishna Hampapuram
Effects Of Demonetisation On Indian Banking System

Guanie Lim
Financing Industrialization in Vietnam: Banking on the State?

Singapore II - Policy and Benchmarking

Ali Khan

Taojun Xie
How Does The Housing Market Respond To Macroprudential Policies? The Case Of Singapore.

Isha Dayal
Impact Of Population Policy On Birth And Fertility Rates: Case Of Singapore

Kidjie Ian Saguin
No Flat, No Child: House Price and Fertility in Singapore

Mun Heng Toh
Measuring & Benchmarking Productivity In Singapore F&B And Retail Sectors:
Application Of 8 Ms Approach

International III - Globalization

Ahmed Khalid

Shao Zhi Li
Globalization And Inequality: New Evidence From China's Regional Value Chains

Robert Rudolf
The Chinese Diaspora And Its Impact On China's Bilateral Trade

Giorgio Dominese
EU and China Crucial Roles in East, Central, South Asia, Middle East and Wider Eastern Europe

Dodo Thampapillai
Environmental Macroeconomics – A Neglected Theme in Environmental
Economics

Parallel Sessions 6	Aug 4 Fri 10.35am	
6.1	International IV	Room 801
6.2	Macroeconomics III	Room 802
6.3	Behavioral III	Room 803
6.4	Financial VI	Mandarin Ballroom I
6.5	Chinese II	Room 804
6.6	Education & Health III	Room 805
6.7	ASEAN III	Grange Ballroom
6.8	Asian Economy III	Room 607

International IV - Trade Agreements

Wai Mun Chia

Hiroshi Mukunoki

Does Trade Liberalization Promote Antidumping Protection? A Theoretical Analysis

Rashidi Said

Antidumping Measure And Its Impacts On Margins Of Trade

Yan Zhou

The Value-added Assessment Of A China-EU Free Trade Agreement: From The Chinese Perspectives

Kalpana Tokas

Preferential Trade Agreements : Evolving Trends & Implications For Value Added Trade

Macroeconomics III - Business Cycles

Park Donghyun

Jang-Ting Guo

Progressive Taxation As An Automatic Destabilizer Under Endogenous Growth

Vo Phuong Mai Le

A Note On News About The Future: The Impact On DSGE Models And Their VAR Representation

Eiji Okano

Revisiting the Fiscal Theory of Sovereign Risk from a DSGE Viewpoint

Sheue Li Ong

What Drives Asian Business Cycle Synchronization? Analysis Of Cross-country Spillover By The Dynamic Factor Model With Time-varying Parameters

Behavioral III - Organized by Jack Knetsch

Songfa Zhong

Te Bao

Social Norm and Giving with Indivisibility of Money

Phumsith Mahasuweerachai

Behavioral Insights and a New Design to Enhance New Technology Adoption Among Thai Farmers

Kiet Nguyen

Estimates of WTP and WTA Values of a Statistical Life in Vietnam

Jack Knetsch (Presented by Phumsith Mahasuweerachai)

WTP or WTA: Determining the Appropriate Welfare Measure When Preferences are Reference Dependent

Financial VI - Markets II

Minwook Kang

Chun-Yu Ho

Policy Distortion In Credit Market: Evidence From A Fiscal Stimulus Plan

Ahmed Mahsood Khalid

Endogenous Money And Bank Stock Returns Evidence From G-7 Countries
Using Panel Data

Sook Rei Tan
Exchange Market Turbulence in Emerging Market Economies: The Role of
Capital Flows

Jae-Ho Yoon
US Monetary Policy And The G7 House Business Cycle: FIML Markov
Switching Approach

Chinese Economy II - Trade, Finance & Investment

Weihong Huang

Zhifeng Wang
Reexamine the dynamic learning by exporting effect in China manufacturing
sector

Zhikai Wang
Entrepreneurship, innovation and mixed ownership reform in China

Lu Zhang
The case of the disappearing IPOs: Financial effects of Chinese import
competition

Zongxin Qian
Over-reaction And Stock Return Reversal In China

Education and Health III - Utilization and Intervention

Taisen He

Jongsay Yong
Utilization of coronary angiography for acute myocardial infraction and stable
ischaemic heart disease: Use, abuse or underuse?

Chantal Herberholz

Social capital and healthcare utilization in Bhutan

Tomoki Fujii

Sources of health financing and health outcomes: A panel data analysis

Tanetpong Choungprayoon

Potential Market Response To Sugar-sweetened Beverages Taxation In Thailand: Evidences From Real Market Choice Experiments

ASEAN III - Trade

Jong-Wha Lee

Yu-Li Wang

How Demographic Transition Affects Trade? A Gravity Study Of ASEAN Countries And Their Trading Partners

Dino Carlo Abanilla Saplala

The Relationship Between International Trade, Financial Development, And Economic Growth In The Philippines

Tamali Chakraborty

Reflection On Conflicts Revolving Around SEZs In India- Case Study Of SEZ Of Mundra, Gujarat

Asian III - Technical Change and R&D

Roland Cheo

Anpeng Li

Technical Progress And Allocative Efficiency

Daishoku Kanehara

R&D Cycle In A Fully-endogenous Growth Model With Population Growth

Sang-Ho Lee

R&D Versus Output Subsidies In A Mixed Duopoly With Partial Privatization

Special Sessions III

Aug 4 Fri 1200-1300

Special 3.1 Environmental Grange Ballroom

Ravi Kumar

Robert Stavins

What Can an Economist Possibly Have to Say about Climate Change (in the Age of Trump)?

Parkash Chander

Dealing With The US Threat to Withdraw From The Paris Agreement

Special 3.2 Econometrics Room 801

Qu Feng

Cheng Hsiao

Incidental Parameters, Initial Conditions and Sample Size in Statistical Inference for Dynamic Panel Data Models

John Rust

Mostly Useless Econometrics? Assessing the Causal Effect of Econometric Theory

Special 3.3 Behavioral Room 802

Jonathan Tan

Jasmina Arivofic

TBA

Erik Snowberg

Econographics: The Foundations of Economic Behavior

Special 3.4 Growth and Trade Room 803

Charles Yuji Horioka

Jesus Felipe

The Debate About The Sources Of Growth in East Asia After A Quarter Of A Century: Much Ado About Nothing

Mehmet Huseyin Bilgin

The Determinants of Turkey's Exports to Islamic Countries: The Impact of Political Risks

Special 3.5 Markets Room 804

Kong Yam Tan

Edward Lazear

Who Gets Hired? The Importance of Competition Among Applicants

Danny Quah

The American Century: Its Demand and Supply

Parallel Sessions 7	Aug 4 Fri 1400	
7.1	International IV	Grange Ballroom
7.2	Microeconomics IV	Room 801
7.3	Labor III	Room 802
7.4	Financial VII	Mandarin Ballroom I
7.5	Environmental II	Room 803
7.6	Asian IV	Room 804
7.7	Innovation	Room 805
7.8	ASEAN IV	Room 607

International IV - Foreign Exchange

Joseph Alba

Isha Gupta

Macroeconomic Impact Of Foreign Remittances On Output Growth Of India: A Keynesian Perspective

Xiaotao Zhao

Can cognitive differences influence the nominal exchange rate?

Satoshi Koibuchi

Cross-border Merger And Currency Risk: Evidences From In-out M&As Of Japanese Firms

Eiji Ogawa

Declining Japanese Yen And Inertia Of The Us Dollar

Microeconomics IV - Applications

William S. Neilson

Chiu Yu Ko

A Welfare Economic Interpretation of FRAND

Junichi Fujimoto

Efficient Risk Sharing Under Limited Commitment And Search Frictions

Mingzhi Li

First Mover Versus Cost Advantage: Network Effects In The Competition Between Proprietary And Open Source Platforms

Pohan Fong

Egalitarian Policy-making in Legislative Bargaining

Labor III - Gender

Yang Tang

Dainn Wie

Trade Liberalization and Demand for Female Workers: Evidence from Indonesia

Hanol Lee

Output Cost Of Gender Discrimination In The Korean Labor Market

Kazuyasu Sakamoto and Yoko Morita

Women's Career Decisions and Earnings Disparities Among Married Couples In Japan

Saima Khan

Selection, Gender And The Impact Of Schooling Type In Urban Slums Of Dhaka

Financial VII - Rationality and Risk

Hwee Kwan Chow

Changtai Li

Price Change, Trading Volume and Beliefs Co-evolve in Stock Market

Weihong Huang

How Agent-based Modeling of our Brain Capture Decision Making in Bank Runs

Matthew Greenwood-Nimmo

Financial Sector Bailouts, Sovereign Bailouts And The Transfer Of Credit Risk

Xinyi Deng

The Relationship Between Housing Bubbles And stock Bubbles: Alternating Or Co-existing?

Environmental II - Organized by Joanna Poyago-Theotoky

Joanna Poyago-Theotoky

Ying-Yi Tsai

Innovation for Green Technology

Jorge Pereira

The Porter Hypothesis: Conditions for social and private gains from an emissions tax under imperfect competition

Santiago Rubio

On Second-best Taxation For A Monopoly With A Stock Pollutant

Joanna Poyago-Theotoky

Managerial Delegation Contracts in a Cournot Duopoly with Pollution

Asian IV - Business Economics

Jesus Felipe

Hiroshi Fujiki

How Do We Pay Under Evolving Retail Payment Technology? Evidence From Japan

Subodh Pandit

The Ripple Effect Of Indian Consumption Behaviour

Lay Lian Chuah
Resource Misallocation And Productivity Gaps In Malaysia

Alexander Blair
A games network explanation of Chinese-style firm networking in Taiwan and Hong Kong

Innovation
Jasmina Arivovic

Ryungha Oh
Knowledge Spillovers And Patent Citations: Trends In Geographic Localization. 1976-2015

Kizuku Takao
Fiscal Policy And Transitional Dynamics In A Schumpeterian Model With Step-by-step Innovation

Philipp Plugmann
The Willingness Of European And Asian Exchange Students To Found An Innovative Technology Company And The Economic Consequences For The Future

Kritsada Patluang
Social Capital Multiplicity For Hidden Innovation In Rural Tourism: Policy Implication For Broadening Non-technological Innovation

ASEAN IV - Agricultural
Mun Heng Toh

Wasawat Khamchanthuek
Hedonic Pricing Method In Determining Flood Prone Agricultural Land Prices: A Case Study In Khon Kaen, Thailand

Kimlong Chheng
Land Property Rights And Household Food Security Among Rice Farmers In Rural Cambodia

Jingjing Cai
Agent-based Simulation Of Cooperation Diffusion In The Irrigation Self-

governance

Parallel Sessions 8	Aug 4 Fri 1545	
8.1	Econometrics IV	Room 801
8.2	Macroeconomics V	Grange Ballroom
8.3	Industry	Room 802
8.4	Financial VIII	Mandarin Ballroom I
8.5	Public IV	Room 803
8.6	Education & Health IV	Room 804
8.7	ASEAN V	Room 805
8.8	Labour IV	Room 607

Econometrics IV - Applied Econometrics

John Rust

Maria Del Carmen Ramos-Herrera

Inflation, Real Economic Growth And Unemployment Expectations: An Empirical Analysis Based On The Ecb Survey Of Professional Forecasters

James Reade

Forecasting and Forecast Narratives: The Bank of England Inflation Reports

Daniel Lewis

Big Data Time Series For Analysis Of Economic Policies Using Social Economic Surveys

Lunan Jiang

Dividend Taxes, Household Heterogeneity and the U.S. Great Depression

Macroeconomics V - Fiscal

Partha Sen

Yuto Kajita

QE Effects On Prices Through A Fiscal Channel

Syed Muhammad Hussain

Using Exogenous Changes In Government Spending To Estimate Fiscal Multiplier For Canada: Do We Get More Than We Bargain For?

Frederik Lundtofte

Loan Pricing Over The Business Cycle

Yasuhiro Nakamoto

Heterogenous Utility Function, Non-degenerate Equilibrium And Wealth Distribution In A Neoclassical Growth Model

Industry

Chun-Yu Ho

Zelong Yi

Digital Piracy And Quality Disclosure

Seulgi Yoo

An Analysis Of Vertical Integration In The Korean Movie Industry: Production, Distribution, And Exhibition

Xiaoxuan Meng

Multi-attribute Product, Consumer Trust, and Policy Implications

Fan Li

Scores Vs. Stars: A Regression Discontinuity Study Of Online Consumer Reviews

Financial VIII - Knowledge and Risk

Kabir Hassan

Congyi Zhou

Financial Literacy And Risky Asset Holdings: Evidence From China

Moinak Maiti

Is Human Capital The Sixth Factor

Chuyi Yang

Law Firm Expertise And Agency Problem In Securities Class Action Lawsuits

Zhuoqing Chen

Persistent Bias In Advice-giving

Public IV - Ageing

Lars Lefgren

Yoko Niimi

You Can't Take It With You: The Saving Behavior Of The Elderly In Japan

Amornrat Apinunmahakul

Saving For Old Age In Thailand

Masaya Yasuoka

Elderly Care Service In An Aging Society

Tatsuyoshi Miyakoshi

Optimal Population Growth In An Aging European Society

Education and Health IV - Fertility and Birth

Ramo Gencay

Masao Nakagawa

Economic Growth With Locked-in Fertility: Under-and Over-investment In Education

Atsushi Miyake

Education Subsidy And Child Allowance In An Endogenous Fertility Model

Xiangcai Meng

Curse Or Blessing: Investigating The Income And Education Of The First-born
And Only-boy

Terry Cheung
Structural Change, Demographic Transition And Fertility Difference

ASEAN V - Socioeconomics

Jubo Yan

Jiaying Chen
Why Rural Children Are More Patient? Evidence From China

Yoko Sakai
Effects of adult supervision on adolescent risky sexual behavior in the
Philippines

Rezenti Putri Pramana
Marriage Timing And Subjective Well-being: Evidence From Age At First
Marriage In Indonesia

Rizky Afian and Ibnu Habibie
Factors Related To Subjective Quality Of Sleep In A Developing Country: An
Evidence From Indonesia

Labor IV - Country Studies II

Qiyang Ong

Tomoko Kishi
State Dependence In Labour Market Transitions: A Comparison Between
Australia And Japan

Matjaz Koman
The Great Depression And Bargaining Power In Europe: Tradeoff Between
Wages, Employment And Profit

Filippo di Mauro
Wage bargaining regimes and firms' adjustments to the Great Recession

Alberto Iniguez-montiel
The Impact Of The Mexican Drug War On Employment And Consumption:
2000-2012

ABSTRACTS

Session 1.1

Chair: Cheng Hsiao

Andrew Adrian Pua; Xiamen University

Should We Use IV To Estimate Dynamic Linear Probability Models With Fixed Effects?

Researchers usually estimate a dynamic linear probability model (LPM) with fixed effects when analyzing a panel of binary choices. Setting aside the possibility that average marginal effects may not be point-identified, directly applying instrumental variable estimators to this dynamic LPM delivers inconsistent estimators for the true average marginal effect under fixed-T or large-n, large-T asymptotics. I show through examples that these inconsistent estimators are sometimes outside the nonparametric bounds proposed by Chernozhukov et al. (2013). In addition, I show through an empirical example that the resulting GMM estimate of the average treatment effect of fertility on female labor participation is outside the nonparametric bounds under monotonicity. The only good news is that nonparametrically testing the point null of zero state dependence is possible with default routines.

Cynthia Fan Yang; University of Southern California

Identification And Estimation Of Spatial Autoregressive Models With Common Factors

This paper considers panel data models with both spatial autocorrelation and unobserved common factors. The conditions for model identification conditional on the factors are derived, and then several estimation approaches that employ cross-sectional averages as factor proxies are suggested, including the 2SLS, B2SLS, and GMM estimation. We establish the asymptotic distribution of these estimators and compare their efficiency properties. Through extensive Monte Carlo experiments, we show that the proposed estimators are robust to unknown heteroskedasticity and serial correlation in the disturbances and have satisfactory finite sample performance for large N (the cross section dimension) and relatively modest T (the time series dimension), which are consistent with our

theoretical findings. Further evidence supporting the identification conditions is also provided by simulations.

Isamu Ginama; Hiroshima University

Mobility and Volatility in International Capital Transfers

Common factor panel methodologies are applied to savings and investment rates in the context of the Feldstein-Horioka puzzle to derive idiosyncratic components of the two variables for OECD countries, Indonesia, and Japan. Bootstrap confidence intervals of the correlation coefficient and the relative variance ratio regarding the two variables are estimated to see, if any, the relationship between the mobility and the volatility of the two variables. The differences in the mobility and the volatility among national data, and the regional data are suggested.

Qu Feng; Nanyang Technological University

Structural Changes in Heterogeneous Panels with Endogenous Regressors

This paper enriches Pesaran (2006) and Baltagi et al. (2016) by allowing for endogenous regressors in large heterogeneous panels with unknown common structural changes. Thus, an empirically appealing panel data model is provided to accommodate important features of endogeneity and structural breaks, in addition to heterogeneity and cross-sectional dependence that prevail in applied studies. We extend the finding of Perron and Yamamoto (2015) in a time series regression model, and use least squares to estimate common break dates even with endogenous regressors in heterogeneous panels. In addition, we show that Pesaran's common correlated effects (CCE) approach is still valid to deal with cross-sectional dependence due to unobservable factors in the presence of endogenous regressors and structural changes in slopes and error factor loadings. Monte Carlo experiments are conducted to examine the proposed estimators in this paper.

Session 1.2

Chair: Naoyuki Yoshino

Kozo Ueda; Waseda University, Koki Oikawa; Waseda University

Reallocation Effects Of Monetary Policy

This study investigates the reallocation effects of monetary policy in a framework that introduces nominal rigidity into endogenous growth with heterogeneous firms. In our theoretical model, menu costs cause non-neutrality of money and, moreover, trigger reallocation among firms. When quality gaps generated by firms are heterogeneous, inferior firms bear heavier burdens of menu cost payments under faster nominal growth. Then, superior firms obtain more market shares and some of inferior firms exit from the market. This reallocation effect turns out a positive impact of monetary expansion on real growth and welfare even when it has a negative impact without reallocation. Our simulation result shows that this positive impact actually occurs under a plausible set of parameters. Hence, the optimal nominal growth can be strictly positive even under nominal rigidity, which makes the optimal nominal growth equal zero in the standard New Keynesian models.

Paul D. McNeils, Fordham University, Hongyi Chen, Hong Kong Institute for Monetary Research, Hong Kong Monetary Authority

Monetary Rules And Policy Targets At The PBoC: Welfare Vs. External Balance?

This paper examines the performance of monetary policy rules when the economy finds itself in dark corners, when the real sector experiences a sequence of negative shocks from world demand, while the central bank faces prolonged low world interest rates on its foreign reserve holdings. We examine variations of policy rules in alternative regimes, one with strong restrictions on capital flows and a fixed exchange rate, and the other one of less restricted capital flows and a more flexible managed exchange rate. Our results show that a more flexible managed exchange-rate system, based on welfare-based Ramsey rules, acts as an effective shock absorber when the economy is in a “dark corner”, thus reducing the fall in real GDP and consumption. However, this benefit comes at a

cost. with a much larger fall in employment and reserves, than in the more restricted fixed-rate environment. By contrast, if the Ramsey rule for monetary policy is based on current-account or external-balance targets, employment and reserve losses are minimal. Our results suggest that external balance, rather than welfare, should be the proper target for monetary policy as the financial system moves toward a more flexible exchange rate and a less restricted capital account, at least when the economy falls into dark corner periods.

Masanori Kashiwagi; Gakushuin University

A Vehicle Currency Country's Welfare Under Optimal Monetary Policy

This paper addresses the welfare consequences for a country issuing vehicle currency, in a standard two-country dynamic general equilibrium model with price stickiness. Deriving optimal monetary policy rules and evaluating welfare under various assumptions regarding currencies for invoicing exports, this paper obtains analytical conditions under which use of vehicle currency in pricing exports actually benefits the vehicle currency country compared with a situation in which each country prices its exports in its own currency. Moreover, this paper numerically illustrates that there is a fairly broad parametrical range that leads to a case in which use of vehicle currency is preferred not only by the vehicle currency country, but also by the non-vehicle currency country.

Masahiko Tsutsumi; Cabinet Office, Government of Japan, Koichi Hamada; Economic Growth Centre, James Leitner

A Sovereign Wealth Fund For A Non-oil Producing Country: The Case Of Japan

A sovereign wealth fund (hereafter SWF) would be an effective tool for preserving Japan's national wealth in the medium to long run under a declining, aging population and for coping with external shocks in the short run. Japan is a typical non-oil producing, developed country that relies significantly on international trade. Its energy dependency rate remains around 93%, and its food sufficiency rate is less than 40%. Despite its high dependence on foreign producers, Japan's asset holdings are still distinctly biased toward domestic assets denominated in Yen. Indeed, nation-wide foreign equity holdings are approximately 30% in Japan, while those of the UK and Germany exceed 45%.

The same pattern holds in the allocation of bonds. The relative foreign asset allocation of Japan remains lower than European levels in part because of the high volatility in exchange rates and the often observed, persistent appreciation of the Yen against the US dollar. Because of this exchange rate risk, international asset allocation is not optimal. After reviewing the economics of a SWF for non-oil producing countries, we propose that Japan establish a SWF as a means of preserving its wealth for future generations.

Session 1.3

Chair: Erik Snowberg

Tetsuya Kawamura; Kansai University

Investigating The Simultaneous Effect Of Aging And The Cognitive Ability On Donating Behavior: Evidence From The Experimental Dictator Games

We investigate what affects the donating behavior of elder people through the single blind dictator game experiments. The experimental evidence is required for policy proposal to make elder people comfortably donate to NPOs and volunteers which assist municipalities suffering from financial difficulties. Prior experimental studies show many demographic factors such as age, gender, living place and cognitive ability of participants affect the donation behavior in experimental dictator games. However, as of our knowledge, there is no study to investigate how the cognitive ability affects the aging effect on the donation behavior. We investigate the aging effect on donation behavior and how the cognitive ability changes the aging effect by conducting a series of single blind dictator game experiments in Suita city in Osaka (urban area) and in Nishikawa town in Yamagata (depopulated area). We conducted 18 and 9 sessions in Osaka and Yamagata, respectively. The experiment had been done from March, 2016 to March, 2017. The 416 and 102 non-student subjects participated in Osaka and in Yamagata, respectively. All the subjects participated in an experiment only once. In all the sessions, the same experimenter read the instructions. Each participant was randomly assigned role A (dictator) or B (recipient), and made a pair with the different role. A role A player was given 2000 points (1 point = 1 JPY), and asked the amount to send to his/her counterpart from 0 to 2000 point. The decision making was done only once. After the dictator game experiment ends, participants answered a test to measure the cognitive ability consisting of 16 questions of the Raven's Advanced Progressive Matrices (APM). The average age of dictators is 56.2 and 47.3 in Osaka and Yamagata area. The age difference between these two areas is significant. The average score in Raven's test is 7.88 in Osaka and 8.43 in Yamagata. The difference in Raven's score between two areas is not significant. The average donation amount is 604.81(30.2%) in Osaka and 929.41(46.5%) in Yamagata. The average donation amount in Yamagata is significantly higher than in Osaka. We find that (1) the older a dictator is, the more s/he donates (aging effect), and that (2) the higher the cognitive ability is, the stronger the aging effect is. The second result indicates that given a level of

the cognitive ability, the older a dictator is, the more the donation amount is. Our results might explain why some elderly people are generous while other elderly people are selfish.

Jaimie Lien; Chinese University of Hong Kong, Jie Zheng; Tsinghua University

The Value Of The Knowledge Of Others

Are the knowledge and higher order knowledge of peers helpful in making the right decisions? We conduct a carefully incentivized experiment designed to test this issue. Subjects are given a test of fifty general knowledge questions, and treatments vary by the information provided to them about the performance, the self-estimated performance and self-estimated relative performances of other participating subjects. Under the varying higher order information settings, we examine the effects of peers' information on subjects' answers to the knowledge questions, and develop a theory about when such information helps or hinders one's own knowledge. Our results are informative about wisdom of crowds and false consensus effects, which are increasingly relevant in an information-connected society.

Jaesun Lee; Tongji University

How Does Competition Affect People Economically And Emotionally?

Competition is fostered in many domains to improve performance, but its psychological impacts on those involved -- and thus their overall utility and well-being -- have not yet received much attention in the literature. This paper investigates the effect of competitive environments on effort provision and mood by conducting a lab experiment and on that basis proposing a simple model that incorporates mood in the utility function. The paper also explores how past experiences affect people's preferences for competitive payment schemes. The results show that people exert greater effort when they work under competitive payment schemes such as piece-rate and rank-order tournament payments than fixed payments. In contrast, these competitive payment schemes, along with rank feedback, make people feel worse. In particular, people with low ranks suffer more as the working environment becomes more competitive. The findings provide evidence that competitive environments may be detrimental to some

people in the left tail of the distribution. Moreover, the paper finds that expected earnings play a more important role than mood in people's preferences for incentive schemes. The study contributes to the literature by introducing the psychological impact of competitive working environments and a potential role of mood in the discussion of preferences.

Jonathan Tan; The University of Nottingham, Yves Breitmoser; Humboldt University, Theodore Turocy; University of East Anglia

Racing Towards a Finishing Line: A Laboratory Experiment

Races are prevalent but little is understood about strategic reasoning in these races. We present a very simple model with a finishing line that is tractable and allows for distinct predictions and observations. In these two player games, players can invest costly effort to make progress steps. The winner gets a grand prize, while the loser walks away with nothing. The finishing line is fixed. Effort certainly leads to progress. The state-of-play is common knowledge. Our theoretical analysis is in Markov Perfect Equilibrium. The only variable we vary across experimental games is the cost of effort in making progress steps. This manipulation is enough to yield a variety of qualitatively different behaviors in MPE, from all-out “sprints” with high effort throughout, mid-race “breakaway” attempts seen in cycling, and others. We observe that effort is inversely related to cost. The leading player is more likely to exert high effort than the trailing player – once in the lead players try to defend it. Also, the larger the distance between the players, the less likely they are to exert high effort.

Session 1.4

Chair: Youngho Chang

Shigeyuki Hamori; Kobe University, Cai Xiao Jing; Kobe University

Interdependence Between Oil And East Asian Stock Markets: Evidence From Wavelet Coherence Analysis

This paper examines the interdependence and causality relationship between oil and East Asian stock returns from 1992 to 2015 and provides a fresh perspective on portfolio diversification benefits using wavelet coherence analysis. This is a novel approach that allows us to measure interdependence between two series in both time and frequency space. We decompose data into 12 levels and six sub-periods to provide generalized and convincing results. We find that the most significant phenomena including high localized volatility, high strength of covariance, and coherence between oil and East Asian stock markets occurred in the mid-term horizon (one to eight years). The empirical results provide strong evidence that the oil and East Asian stock markets experienced contagion effect during the global financial crisis period. We also find that oil prices and the East Asian stock market move in phase, and oil prices lead to stock returns in the long run. We provide evidence that a high level of interdependence affects VaR estimation, and the benefits of oil-stock portfolio diversification vary across frequencies and over time. This study provides information that can guide investors in diversification efforts while investing in oil and East Asian stock markets.

Cai Xiao Jing; Kobe University, Shigeyuki Hamori; Kobe University

Modelling interdependence between East Asian stock markets and the prices of oil and gold: a wavelet based approach

This paper examines the interdependence of East Asian stock markets and crude oil and gold prices across different time scales using the wavelet transform analysis and conditional copula functions. Most interdependence and tail dependence between oil and East Asian stock markets increases as time scales increase. The gold and stock interdependence is always weaker than those of oil-stock pairs. The tail dependence did not obviously increase in the short-term and midterm horizon and sharply increased in the long run. This study has implications for international investors to optimize their portfolio allocation.

Marc Bohmann; University of Technology Sydney

Informed Trading In Commodity Derivatives Around News Announcements

We examine the behavior of US commodity futures and options volatility-based measures for corn, soybeans, wheat, crude oil, natural gas, gold, and silver around macroeconomic announcements report releases between 2006 and 2015. In the five days preceding surprise news, we report abnormal levels of implied volatility spreads and skew of futures options especially for metal options. Our results indicate that information leakage occurs in the commodity futures options market with a higher concentration in out-of-the-money options for grains. We also argue that abnormal implied volatility spreads in more leveraged options show strong predictive ability for announcement day returns compared to volume-based measures.

Hideobu Okuda; Hitotsubashi University, Daiju Aiba; Hitotsubashi University

Fund Raising Behaviors In A Highly Dollarized Developing Economy: Estimating The Determinants Of Capital Structure Of Cambodian Firms

This paper is the first attempt to econometrically investigate the features and determinants of dollar-denominated financing of firms in the almost completely dollarized credit market, by using the questionnaire survey conducted by the National Bank of Cambodia and JICA. By adopting sample selection models, we estimated the determinants of the dollar-denominated bank leverage ratios of firms. The major results of the estimation are as follows: Firstly, the dollar-denominated bank leverage ratios of firms depended positively on how much collateral they could provide for borrowing. Secondly, firms that purchased property and casualty insurance had higher bank borrowing ratios. Thirdly, highly profitable firms with higher dollar-denominated income ratios tend to increase dollar-denominated bank leveraged ratios, while they were not affected by firms' dollar-denominated income ratios alone. These results suggest that, in dollarized economies with underdeveloped financial systems such as that in Cambodia, (i) additional business risk accompanied with dollarization makes it more difficult for firms to use external debt, (ii) external debt procurement of firms heavily depends on how much collateral they can provide, and (iii) banks have large indirect balance sheet risks caused by the currency mismatch between the income and expenditure of borrowing firms.

Session 1.5

Chair: Jinhua Zhao

Jonathan van der Kamp; EIFER / KIT

Social Cost-benefit Analysis Of Air Pollution Control Measures ? Advanced Assessment Of Industrial Point Emission Sources

Ambient air pollution increases the risk for humans to develop diseases and to die prematurely. This imposes costs on society. Welfare-oriented policy-making aims at integrating these costs into market prices, e.g. by reducing harmful atmospheric emissions from industrial sources. Following neoclassical economic theory, emissions should be reduced to the point where the marginal costs equal the marginal benefits of emission control. Social cost-benefit analysis (CBA) serves to approximate this equilibrium. Scientific methods for social CBA related to air pollution at an aggregate level are well developed in the public policy context, as they are a mandatory support for the preparation of new regulations for instance in the USA and Europe. Yet, analogous approaches for decision-support at the level of industrial point emission sources are rare. Existing models do not properly capture temporal and spatial variations. The current work aims at filling this gap by enhancing economic methods for social CBA of emission control measures, notably regarding health damage cost assessment. A power plant retrofit is analysed as a case. The main achievements are to transfer the social CBA method to the site level, to quantitatively test the influence of key modelling and methodological choices on health damage costs, and to derive recommendations with regard to uncertainty and private sector decision-making. The results underline the importance of methodological guidance from official bodies to avoid arbitrary choices in social CBA, thus promoting the integration of health damage costs into decision-making at site level.

Mengmeng Guo; Southwestern University of Finance and Economics, Shihe Fu; Xiamen University

Running With A Mask? The Effect Of Air Pollution On Marathon Runners' Performance

A growing literature finds a sizable, negative effect of air pollution on human health and short-run productivity. This study contributes to this literature by estimating the causal effect of air pollution on marathon runners' performance (finish time) using a sample of over 0.3 million runners in 37 cities and 55 races in China in 2014 and 2015. Our causal identification mainly relies on the exogeneity of air quality because runners are required to register a race a few months in advance and air quality on the race day can be considered random. We estimate the air pollution elasticity of finish time to be 0.0366. This effect is economically significant because of large variations in air quality across cities in China. For example, an average full-marathon runner will need 14.5 more minutes to cross the finish line if he or she were to run the Beijing marathon in 2014 when the air is severely polluted compared with running on a day with excellent air quality. The most closely related paper is by Lichter et al. (2015). They find that a 1% increase in the concentration of PM10 leads to a 0.02% decrease in professional soccer players' performance (measured by the number of passes in a match) in Germany, an elasticity twice smaller than ours but still comparable. Their causal identification takes advantage of exogeneity of match scheduling which is controlled by the German Football League and beyond the control of teams and players. Our study complements theirs by providing similar robust, negative effect of air pollution on runners' performance. Other related literature can be grouped into two strands. The first is a large literature documenting a harmful effect of air pollution on human health, including effect on cardiopulmonary diseases, respiratory infections, lung cancer (EPA, 2004); infant morbidity (Chay and Greenstone, 2003); asthma (Neidell, 2004); and life expectancy (Chen, et al., 2013). Particularly, the sports health literature provides evidence for a negative effect of air pollution on athletes' health and performance (see for example, Rundell (2012)). The second strand of literature focuses on the effect of air pollution on short-run productivity. Chang, et al. (2014) find that PM2.5 reduces productivity of pear packers in California. Adhvaryu, et al. (2014) find that PM2.5 reduces hourly productivity of workers in garment factory in India. Li, et al. (2015) find that PM2.5 reduces productivity by 15% for manufacturing workers in Hebei Province in China. Air pollution has also been found to increase students' absence (Currie, et al., 2009) and to reduce

students' cognitive performance or test scores (Lavy and Roth, 2014). Our study adds to this literature by providing empirical evidence for the negative effect of air pollution on marathon runners' performance. Our findings have a few important implications for professional athletes who engage outdoor sports, for city governments organizing mega outdoor events, and for the growing running industry. Our estimates show that the negative effect of air pollution on top runners is also sizable. This suggests that professional athletes who participate outdoor sports games to compete for award should consider the negative impact of air pollution on their performance. Many city governments organize various mega events, such as world exhibition, world or nation-wide sports games. Since air pollution have negative effect on both health and performance of people, city governments need to consider the cost and benefit of hosting mega outdoor events on heavily polluting days, particularly, in large cities like Beijing which is notorious for its severe air pollution. On October 19, 2014, the air pollution is severe in Beijing, but the Beijing government did not want to reschedule the marathon race. Many runners quitted; one fifth of the 30,000 runners ran the race wearing all kinds of mask. This true story motivates our study and we hope in the future runners do not need to wear mask to run any races. Our findings are also informative to the growing running industry in China. The number of runners in China is estimated to be about 10 millions, including runners running outdoors and in gym. More and more cities rush to organize marathon races. The running industry, including retailers of running gears, running clubs, and race organizations, is growing rapidly. Our study suggests that the industry participants need to consider the negative effect of air pollution on runners and the ripple effects on event management and sales of running products.

Jiefang Xu; Anhui University, Pin Ng; Northern Arizona University

Environment, Resources And Ecology-an Empirical Study Based On 27 Coal Resource-based Cities In China

Coal has long been the main energy source throughout the process of China's economic development and is a highly polluting energy source. Coal resource-based cities face a series of economic, social and ecological problems as the result of long-term mining, the most serious of which is the emergence of coal mining subsidence areas—the sinking or shifting of the ground surface resulting from collapse in the underground mine. With the continuously changing mode of

economic growth, the traditional growth model that relies heavily on raw resources has been challenged. How to sustain the continuous development of coal resource-based cities has become a major concern for both academia and government bodies. We will evaluate the sustainable development of coal resource-based cities from the perspective of ecological, resource, and environmental efficiency.

Data Envelopment Analysis (DEA) was proposed by Charnes, Cooper, and Rhodes in 1978 to evaluate the relative effectiveness of different decision-making units in multi-input and multi-output situations. However, the results of the analysis may reveal multiple decision-making units having the same efficiency value. In such scenario, further sorting and comparison among the units will be rendered impossible. On the basis of the DEA model, Anderson (1995) proposed a super-efficiency DEA model that enables comparison and ranking of decision-making units that all fall on the production frontier. In addition, the super-efficiency DEA allows a dynamic evaluation of the efficiency of the decision unit over time and helps us understand the causes of the change in efficiency over time with the help of regression analyses. Using a panel data of 27 major coal resource-based cities in China from 2004 to 2013, we utilize the super-efficiency DEA model to measure ecological, environmental, and resource efficiency. The constructed ecological efficiency indicator is used to describe the degree of sustainable development of coal resource cities while the environmental efficiency indicator serves as a measurement of the reduction in environmental damage and the resource efficiency indicator is used to describe the reduction in resource consumption in the process of sustainable economic development.

Muhammad Shahbaz; Montpellier Business School

Globalization-Emissions Nexus: Testing the EKC hypothesis in Next-11 Countries

This study investigates the association between globalization and carbon emissions for N-11 countries for the period 1972–2015. We test the EKC between globalization and CO₂ emissions by comparing short-run and long-run elasticities, and validate the robustness of the EKC using traditional methods. In doing so, we apply a bounds testing approach to test the presence of cointegration between globalization and CO₂ emissions. The results confirm the presence of a U-shaped association between globalization and carbon emissions

in a comparison of the short-run elasticity and long-run elasticity of globalization in the case of Bangladesh, Iran, and South Korea. In contrast, the traditional approach validates an inverted-U relationship between globalization and carbon emissions (i.e., EKC) in the case of Pakistan and South Korea, but the association between both variables is U-shaped for the Philippines and Vietnam. The presence of an inverted-U or U-shaped relationship between globalization and carbon emissions has important policy implications for globalization as an economic tool for sustainable economic development, as well as for the long-term sustainable environmental quality of N-11 countries.

Session 1.6

Chair: Tomoko Fujii

Kelvin KC Seah; National University of Singapore

Immigrant Educators And Students' Academic Achievement

Using a dataset which allows students to be linked to their teachers, this paper examines how educators with an immigrant background affect the academic achievements of secondary school students in the United States. To account for the possibility that immigrant and native teachers may be assigned to different types of schools, and even within schools, to different types of students, two estimation strategies are employed. The first estimates the immigrant teacher impact by comparing the achievements of students with immigrant teachers to the achievements of observationally similar students with native teachers, within schools. The second compares the achievement of a student with an immigrant teacher in one subject to the achievement of the same student with a native teacher in another subject. Contrary to popular perception, the results suggest that, overall, immigrant teachers do not have a negative impact on the educational achievements of native students.

Luca Facchinello; Singapore Management University

Does Peer Ability Affect Education Choices?

Classroom ability matters if children assess their own academic ability relative to their peers. I use detailed survey and administrative data on a cohort of Swedish 6th graders to estimate the effect of classmates' ability on students compulsory school choices. Class ability appears to be as good as randomly assigned within schools, which allows to give causal interpretation to the estimates. I find that a one standard deviation increase in average class ability reduces by 2 percentage points the probability of taking an advanced math course in grades 7 to 9. Peer ability does not affect English course choices in grades 7 to 9, and whether students choose academic tracks in high school. I look at underlying mechanisms and show that peer ability negatively affects students' assessment of own ability. The different reduced-form effects on math and English course choices reflect different spillovers in performance: students benefit much more from from

having high ability peers in English, an interactive subject, than they do in math. Finally peer ability does not seem to affect student's motivation, class interaction and parental support, but positively affects teacher interaction.

**Yi-Cheng Kao; Chung Yuan Christian University, WeiCheng Chen;
National Chung Cheng University, Pei-Ju Liao; Institute of Economics,
Academia Sinica**

Rational Phd Glut

There exists a growing glut of PhDs in academia. In this study, we develop an occupational choice model with rational PhDs to explain the phenomenon and provide quantitative and welfare analysis. We distinguish two stages of market demand for PhDs. The first stage is the professors' demand for doctoral students in knowledge production. The second stage is the market demand for professors in higher education. Students will choose an academic career if their expected lifetime income, i.e., the training wage in the first stage plus the discounted professor wage, meets the participation constraint. By calibrating the model to Taiwanese data, our result shows that the PhD glut exists in all fields and social sciences has the largest deviation from the socially optimal level.

Yuan HU; the Chinese University of Hong Kong

Sex Ratios And Divorce: Evidence From China

Since the implementation of the one-child policy in China in 1979, more boys than girls have been born and male-to-female sex ratios have been rising dramatically. The increasingly high male sex ratios result in changes in the marriage market composition, provide more marriage opportunities for women, and influence women's marital behavior. This paper focuses on divorce rates, which has been on the rise in the latest decade. We hypothesize that greater marriage opportunities brought about by sex imbalance present more alternatives to married women, alternatives that have been linked to marital dissolution. Exploring the effect of imbalanced sex ratios on county-level divorce rates and individual-level divorce probability, we find that higher sex ratios increase rates of divorce as well as marriage for women, and decrease women's chance of

being never-married. Finally, we explain why and how sex ratios affect marital instability. Imbalanced sex ratios lead to gender difference in search costs, which may influence match quality, match pattern and spousal bargaining position and thus affect marriage dissolution.

Session 1.7

Chair: Stanislav E. Shmelev

Yanying Chen; Singapore Management University, Yi Jin Tan; Singapore Management University

Income and subjective well-being: Evidence from Singapore's first national non-contributory pension

Using a new monthly longitudinal survey of elderly Singaporeans, we precisely time and study the announcement and disbursement effects of an exogenous permanent income shock on a broad range of subjective well-being domains. The source of this permanent income shock is a new means-tested non-contributory pension, the Silver Support Scheme (SSS). Using a difference-in-differences strategy, we find that pension recipients experienced improved life satisfaction upon announcement of the SSS; this rise was sustained after disbursement of SSS payouts. This improvement appears to be driven by social, household income, and economic satisfaction. In addition, we find evidence that the marginal utility of income varies – recipients who reported being less financially prepared for retirement exhibited larger increases in well-being. Surprisingly, we find little evidence of such heterogeneity by individuals' net assets. Lastly, well-being improved negligibly when an individual's spouse received SSS payouts, while he/she did not.

Soon Beng Chew; Nanyang Technological University

The Role of Singapore Employer's Central Provident Fund Contribution Rates as an Economic Restructuring Tool

The Singapore Central Provident fund (CPF) is a national contributory provident fund that is designed primarily for citizens' post-retirement security. However, mandatory employers' contributions of an extra 17% of workers monthly salary to the provident fund represent an additional labour costs in doing business in Singapore. During the last few economic crises, Singapore government was able to keep its competitiveness by cutting labour and business costs via reducing employers' CPF contribution rates. We are interested in understanding the future role of employers' CPF contribution rates as an economic restructuring tool.

First, we identified that there is a strong and significant association between national unemployment rates and changes in employers' CPF contribution rates, suggesting that Singapore's main economic policy focus is to minimize unemployment. Second, we found that employers' CPF contribution rates cut have a positive impact on manufacturing sector firms' annual surplus ratio and firms in industries with low annual surplus ratio benefit more. Our results provide some illumination on the possible changes in the 2017-2018 employers' CPF contribution rates in view of the current economic downturn. We discuss and conclude that a cut in employers' CPF contribution rates should remain as an interim measure and not sustainable in the long run. All businesses and manufacturing firms should rely on fundamentals to survive, provide what society wants and make money, and contribute back to society in terms of providing good wages and quality employment.

Irene Ng; NUS, Qiyang Ong, Walter Theseira; Singapore University of Social Sciences

Does Improved Cognitive Functioning Reduce Poverty? Evidence From a Field Experiment on Debt Relief

Recent research links poverty to deficits in cognitive functioning. The poor are often burdened with chronic debts, which further impose cognitive 'bandwidth taxes', contributes to psychological distress, and increases risk aversion. However, there is surprisingly little evidence on whether measures of cognitive and psychological functioning are functionally related to objective material indicators of welfare of those in poverty. Without better evidence, it is not clear that policy interventions which seek to relieve those in poverty of the 'bandwidth tax' on cognitive functioning will realistically lead to permanent improvements in outcomes such as employment, incomes, and personal financial management. We provide evidence on this question by studying the effect of a charitable program which cancelled up to \$5,000 Singapore Dollars of debt for highly indebted, low-income households. The magnitude of debt relief is substantial and worth about half a year's income for the households in the program. We conducted a comprehensive household financial survey that included measures of cognitive functioning, risk-taking, and psychosocial functioning, surveying participants immediately before and after debt relief, and following up one year after debt relief. We find that debt relief causes immediate improvements in cognitive functioning and a reduction in symptoms of generalized anxiety

disorder, while risk tolerance increases immediately after debt relief. One year after debt relief, there is no evidence of improvement in personal finances associated with the debt relief-induced psychosocial improvements. Taken together, the evidence suggests caution in interpreting research on the 'bandwidth tax' of poverty. While reducing cognitive bandwidth taxes through debt relief leads to immediate cognitive gains, our evidence shows these improvements in cognitive functioning do not translate to persistent improvements in material well-being.

Maitreyee Mukherjee; Lee Kuan Yew School of Public Policy

Effects Of Weather On Seasonal Patterns Of Hand Foot Mouth Disease In Singapore

Seasonal infections are a significant cause of morbidity worldwide. In temperate regions with distinct seasonal variations in weather parameters, specific cycles of infectious diseases have been observed (Altizer et al. 2006; Dowel et al. 2003; Makinen et al. 2008; Ma et al. 2010; Feng et al. 2014) . In tropics too, despite absence of seasonal variations, consistent patterns of seasonal infection has been found (Shek & Li, 2003). Information on epidemiology and seasonality of infections is not only helpful in planning preventive strategies and treatment facilities; it also helps to have prior estimation regarding public health burden for communities.

This paper intends to examine the impact of weather (temperature, rainfall, relative humidity) on patterns of occurrence of Hand Foot Mouth Disease (HFMD) in Singapore. This information would have significant implications for the Public Health Department, Singapore in planning ahead control measures and treatment/ health facilities for HFMD. Predictions over future seasonal patterns might also be helpful in spreading awareness among the target community before hand. This research has used data on weekly occurrence of infectious diseases from Singapore public data portal (data.gov.sg) and weather parameter information from Meteorological Survey of Singapore website. Data on weekly infection cases and weather parameters were matched and compiled together. Time-series analysis was then performed to find presence of causality effects and estimate forecast models. Preliminary results show significant relationship of HFMD occurrence with rainfall and temperature patterns. Hot and humid climate was found to be more conducive for severe outbreaks. It was

also noted that years with higher rainfall patterns coincided with higher peaks of HFMD cycle as well. Finally, application of several forecast model to predict future HFMD cycles showed that ADL (2,2) or VAR(4) models may be reliably used to predict annual outbreak pattern of HFMD.

Session 1.8

Chair: John Ham

Yanjun Li; University of Bologna, Yu Bai; University of Bologna

Good Bye, Chiang Kai-shek? Long-lasting Effects Of An Autocratic Regime

Does an autocratic regime, experienced in their early age, have a long-term effect on people's political attitudes, voting behavior and national identity? Based on around 2500 observations from the Taiwan social change survey, We used exploit variations between the same birth cohort in Taiwan from 1972 to 1987 and find that exposure to an autocratic education during youth reduces subsequent satisfaction with democracy, increases the likelihood to support and vote for Kuomintang, and decreases the probability of self-declared Taiwanese identity, rather than Chinese. Results are robust after controlling for other potential confounding factors and changing the way to define different groups.

Hiroaki Hayakawa; University of Brunei Darussalam

Socio-cultural Evolution, Institutionalized Dispositions, And Rational Expressive Behavior

This paper explores the possibility of grounding human behavior in a social space and characterizing it as a rational expressive, norm-guided behavior based on institutionalized dispositions under bounded rationality. For this purpose, we first review critically the four major theories of cultural evolution, namely, Adam Smith's theory of moral sentiments, Veblen's theory of leisure class, and Bourdieu's theory of habitus and distinction, in order to abstract the common core that provides a basis on which to build a theory of rational expressive behavior under the constraints of economic factors, information flow, social sanctions, and psychological satisfaction. In particular, the paper addresses the following questions: (1) how preferences turn into institutionalized dispositions through habituation, (2) how a socio-economic order evolves as a product of institutionalized dispositions, cultural capital of life-styles, expressive symbolism, and social norms, (3) how social want emerges as a convoluted want reconstituted of social facts of life-styles and desire for upper status

identification, (5) how is the behavior based on this want related to the bounded rationality in problem solving. Our inquiry will show that human behavior embedded in a socio-cultural context can be characterized as rational behavior seeking symbolic profits defined by the social want satisfying capacity of choice objects, and that such rational behavior is the source of predictable behavior that can serve as a medium of cultural evolution. Keywords: Institutionalization, Common normative values, Dispositions, Evolution, Expressive Behavior, Symbolic Profit, Social Want, Lifestyles, Emulation and Avoidance, Bounded rationality JEL Class.: Z13, B52, B25.

Rintaro Yamaguchi; Kyushu University

Corruption, Institutions, And Sustainable Development: Theory And Evidence From Inclusive Wealth

Institutional quality has been known to be a key factor explaining economic growth, and more recently, sustainable development. Comparing corruption linked to either resource extraction or land development, we first consider theoretically how institutions affect natural capital shadow prices and degradation. In the corrupt land development model, total land value could be positive or negative; and the effect of institutions is not symmetric in both models. Taking corruption control as an example, we then study how institutions affect various components of natural capital, as well as inclusive wealth, using data from Inclusive Wealth Report. Fixed country effects estimates using panel data show significantly positive effect of corruption control on the change of non-renewable resources, and some limited results for forest and agricultural land. Also, the effect of resource abundance on some resources are found. We broadly observe corruption control affects positively natural capital per capita, but the channels and lead time could be different depending on subcategories.

Jiankun Lu; Zhejiang University of Finance & Economics

Signal and Political Accountability: Environmental Petitions in China

In the absence of both local elections and national political parties, vertical accountability in China has long been considered as essentially indirect or informal. This paper provides the evidence that direct local accountability may

exit more or less in China under current political institutions. By using provincial environmental petition data, this paper finds that the number of environmental petitions is positively associated with provincial governments' investment in pollution mitigation; however, such effects do not contribute to local greenness. The increased petitions may serve as a signal to provincial leaders of the likelihood of potential social instability. The fear of demotion incentivizes provincial leaders to respond to the public. Since "local" provincial party secretaries (who were born or rose from low to high positions within the province they govern) are better informed and have a better network of connections in their jurisdictions, the signaling effect of the petition is lessened. Thus, compared to locals, "nonlocal" provincial party secretaries (who were not born in the provinces they govern, making their career advancements elsewhere) are more accountable to the public.

Special Sessions I

1.1 Development and Growth

Chair: Bernard Yeung

Justin Lin; Peking University

Development Ideas and Development Performance: A New Structural Perspective

After WWII, almost all developing countries adopted various policies, guided by prevailing theories, to pursue industrialization and modernization in their countries. Most countries failed in their attempts. The lecture uses the new structural economics as a framework to exam the ideas in those prevailing theories and explain why those theories failed to help developing countries realize their development goals. The lecture also provides a new structural economics approach for development.

Bio:

Justin Yifu LIN is Director of Center for New Structural Economics, Dean of Institute of South-South Cooperation and Development and Professor and Honorary Dean of National School of Development at Peking University. He was the Senior Vice President and Chief Economist of the World Bank, 2008-2012. Prior to this, Mr. Lin served for 15 years as Founding Director and Professor of the China Centre for Economic Research (CCER) at Peking University. He is the author of 23 books including *Against the Consensus: Reflections on the Great Recession*, *the Quest for Prosperity: How Developing Economies Can Take Off*, *Demystifying the Chinese Economy*, and *New Structural Economics: A Framework for Rethinking Development and Policy*. He is Councillor of the State Council, a member of the Standing Committee, Chinese People's Political Consultation Conference, and Vice Chairman of the All-China Federation of Industry and Commerce. He is a Corresponding Fellow of the British Academy and a Fellow of the Academy of Sciences for Developing World.

Jong-Wha Lee; Korea University

Convergence Success and the Middle-Income Trap

We investigate economic growth experiences of middle-income economies over the past half-century, with a focus on their performance during the transition period. Middle-income economies are classified into two groups, “convergence success” and “non-success”, based on speed of transition to high-income status over the period, 1960-2014. In particular, the “convergence success” includes those of middle-income economies who graduated to high-income status or have achieved rapid convergence progress. In addition, when an economy in the “non-success” experienced growth deceleration, we define such episode as “middle income trap”. The probit regression analysis is used to identify sources of these differences in growth experience among the middle-income economies. The “convergence success” tends to maintain sound policy factors, including a high investment rate, strong human capital, high trade openness, and the maintenance of rule-of-law, and to achieve industrial upgrading, compared to the “non-success”. Adding to weak fundamental policy factors, hasty deregulation, financial liberalization and opening would cause the “non-success” to fall in the “middle-income trap”. Keywords: Economic growth, convergence, middle income trap. JEL Classifications: O11, O14, O47, O57

Bio:

Jong-Wha Lee is a professor of economics and director of the Asiatic Research Institute at Korea University, and a president of the Korea International Economic Association. He served as a senior adviser for international economic affairs to former President of the Republic of Korea. He was also previously Chief Economist and Head of the Office of Regional Economic Integration at the Asian Development Bank and an economist at the International Monetary Fund. He has taught at Australian National University, Harvard University and Peking University, and served as a consultant to the Harvard Institute for International Development, the Inter-American Development Bank, the United Nations Development Programme, and the World Bank.

He has published extensively on topics relating to human capital, growth, financial crises, and economic integration in leading academic journals. His most recent books include *Is this the Asian Century* (World Scientific, 2017), *Crisis and Recovery: Learning from the Asian Experience* (World Scientific, 2016), *Education Matters: Global Schooling Gains from the 19th to the 21st Century*, coauthored with R. J. Barro (Oxford University Press, 2015) and *Rebalancing for Sustainable Growth: Asia's Postcrisis Challenge*, co-edited with M. Kawai

(Springer, 2015). He is a regular columnist for Project Syndicate and Korea JoongAng Daily.

He was awarded Chung-Ram Award (best young Korean economist) in 1997, Mae-Kyung Economist Award in 1997, and Dasan Economics Award in 2015. He obtained his Ph.D. and Master's degree in Economics from Harvard University.

1.2 Financial Crisis

Chair: Basant Kapur

Harald Uhlig; University of Chicago

Mortgage-Backed Securities and the Financial Crisis of 2008: a Post Mortem

We examine the payoff performance, up to the end of 2013, of non-agency residential mortgage-backed securities (RMBS), issued up to 2008. For our analysis, we have created a new and detailed data set on the universe of non-agency residential mortgage backed securities, per carefully assembling source data from Bloomberg and other sources. We compare these payoffs to their ex-ante ratings as well as other characteristics. We establish five facts. First, the bulk of these securities was rated AAA. Second, AAA securities did ok: on average, their total cumulated losses up to 2013 are under six percent. Third, the subprime AAA-rated RMBS did particularly well. Fourth, the bulk of the losses were concentrated on a small share of all securities. Fifth, later vintages did worse than earlier vintages. Together, these facts call into question the conventional narrative, that improper ratings of RMBS were a major factor in the financial crisis of 2008.

Bio:

Harald Uhlig, born 1961, is Professor at the Department of Economics of the University of Chicago since 2007, and was chairman of that department from

2009 to 2012. Previously, he held positions at Princeton, Tilburg University and the Humboldt Universität Berlin. His research interests are in quantitative macroeconomics, financial markets and Bayesian econometrics. He served as co-editor of *Econometrica* from 2006 to 2010 and as editor of the *Journal of Political Economy* since 2012 (head editor since 2013). He is a consultant of the Bundesbank, the European Central Bank and the Federal Reserve Bank of Chicago. He is a fellow of the Econometric Society and a recipient of the Gossen Preis of the Verein für Socialpolitik, awarded annually to an economist in the German-language area whose work has gained an international reputation.

Takatoshi Ito; Columbia University

EM Asian Growth and Financial Stability: Twenty Years after the Asian Financial Crisis

Many lessons were learned by EM Asia in the wake of Asian Financial Crisis (AFC): many EM Asia have adopted variants of the managed exchange rate regimes; Explicit inflation targeting was adopted by four countries; Financial supervision was strengthened; Capital markets have been expanded and local-currency bonds have been issued; self-insurance (piling foreign reserves) has been adopted. As a region, Chiang Mai Initiative Multilateralization (CMI-M) has been fortified by a surveillance unit of AMRO. During the Global Financial Crisis (GFC) of 2008-09, EM Asian countries experienced capital outflows, but withstood the shock. As of 2017, twenty years after the AFC and almost ten years after GFC, EM Asia seems to be financial resilient against external shocks. However, there remain challenges. The growth has slowed down and a fear of “middle-income trap” is talked about. The growth convergence with orderly advances of manufacturing industries seems to be coming a premature stop. The need for infrastructure investment for further growth is still enormous, and human capital for innovation (TFP growth) is difficult to be built up. The future of EM Asian countries depend mainly on their own policies, and less on external assistance or external financial shocks.

Bio:

Takatoshi Ito, Professor, School of International and Public Affairs, Columbia University, has taught extensively both in the United States and Japan since finishing his Ph.D. in economics at Harvard University in 1979. He taught at the *University of Minnesota (1979-1988)*, *Hitotsubashi University (1988-2002)*, and

the University of Tokyo (2004-2014) before assuming his current position in 2015. He held visiting professor positions at *Harvard University*, *Stanford University*, and *Columbia Business School*, and *University of Malaya*. He has distinguished academic and research appointments such as President of the *Japanese Economic Association* in 2004; Fellow of the *Econometric Society*, since 1992; Research Associate at the *National Bureau of Economic Research* since 1985. Ito served as Senior Advisor in the Research Department at the *International Monetary Fund* and as Deputy Vice Minister for International Affairs at the *Ministry of Finance* of Japan, and a member of the *Prime Minister's Council on Economic and Fiscal Policy*. He is an author of many books including *The Japanese Economy*; and more than 60 refereed journal papers. He frequently contributes op-ed columns to the *Financial Times*. He was awarded by the Government of Japan the National Medal with Purple Ribbon in June 2011 for his excellent academic achievement.

1.3 Environmental

Chair: Fuhai Hong

Jinhua Zhao; Michigan State University

Aggregate Emission Intensity Targets: Applications to the Paris Agreement

We compare aggregate emission intensity, quantity and price targets adopted at the national level but implemented cost effectively at the firm level. We obtain simple ranking conditions that depend on the slope ratio of marginal emission damage and marginal abatement cost curves, and threshold parameters determined by the variance and covariance of GDP and business-as-usual emission. We apply the ranking conditions to the top twelve CO2 emitters with specific GHG targets in the Paris Agreement, and obtain a robust result that intensity targets dominate quantity targets for most of these nations.

Bio:

Jinhua Zhao is a professor of economics and the director of the Environmental Science and Policy Program at Michigan State University, and a special term professor at Shanghai University of Finance and Economics in China. He is a member of the Environmental Economics Advisory Committee of the US

Environmental Protection Agency's Science Advisory Board as well as a member of the Air, Climate and Energy Committee of EPA's Board of Scientific Counselors. He was a co-editor of the *Journal of Environmental Economics and Management* and served on the editorial councils of *JEEM* and the *Review of Development Economics*, and is on the editorial committees of *Annual Review of Resource Economics* and *Frontier of Economics in China*. He conducts research in the broad area of environmental and resource economics, with special interests in global climate change, energy economics, water, technology adoption, dynamic decision making under uncertainty, and applied microeconomics in general. He has conducted research on climate change adaptation, international climate negotiations, emissions trading, soil carbon sequestration, renewable energies, and the long-run relationship between international trade and the environment. His research on China's environment includes air quality valuation and payment for ecosystem services in Western China. His publications have appeared in, among others, *Economic Journal*, *International Economic Review*, *Journal of Economic Theory*, *Journal of Public Economics*, *JEEM* and *American Journal of Agricultural Economics*. His research projects have been funded by US National Science Foundation, US Department of Agriculture, US EPA, and NASA.

Renate Schubert; ETH Zurich

Distributional Effects of Green Electricity Defaults

Defaults have a strong impact on decision making. Individuals choose an option more often when it is presented as the default, an effect that has been demonstrated in a rich variety of domains, such as organ donation (Johnson and Goldstein, 2003), pension schemes (Carroll et al., 2009, Choi et al. 2003, Cronqvist and Thaler, 2004), printer (Egebark and Ekstroem, 2013) or thermostat settings (Brown et al. 2013), donations to charities (Altmann et al., 2014), or the choice of green electricity (Ebeling and Lotz, 2015 or Pichert and Katsikopoulos, 2008).

Whereas the effect and impact of defaults on individual behavior have been thoroughly researched, very few studies assess in detail who is defaulted into a decision and why. For instance, Brown et al. (2011) investigate which groups in society are particularly prone to stick to defaults. Studying the use of defaults in retirement saving decisions, the authors find that individuals with low education levels and low decision-specific literacy stay with the default more often than

others. Additionally, inadequate information about a choice situation, procrastination or perceiving the default as an implicit recommendation also leads people to choose default pension plans. Interestingly, Brown et al. (2011) find that those who stay with the default plan are the least content with their choice. Thus, it may be hypothesized that individuals who regret their default choice, do so because the default reduces their economic pension outcome in comparison to any other plan. Thus, the (mis-)use of defaults may have considerable impacts on individual welfare. Recently, defaults have also been used in seemingly less consequential (at least on a personal level) consumption domains, such as, for instance the purchase of green electricity. Such defaults are often advertised as win-win situations, as they may not impact individuals' welfare by much and help to fund public goods. However, on the basis of the results of Brown et al. (2011), if it was the case that less sophisticated individuals are more prone to choice defaults, and more often regret these choices than others, then a green electricity default would act like a tax burden on a financially vulnerable segment of the population. In order to investigate the distributional and welfare effects of the use of consumption based choice defaults for green electricity contracts, this research aims at assessing three central questions: (1) Who defaults into green electricity? Are there groups in society that are particularly prone to defaults? (2) Why do people stay with green electricity defaults? Are some explanations why individuals are prone to defaults more frequent in certain groups of society than for others? Is deliberate defaulting, i.e. forgoing an active choice, a common reason to stay with consumption based defaults? (3) Does a default distort choices? Would people choose differently in a situation of active choice? If so, what are the effects on individual welfare? Do the individual welfare effects differ for different segments of society? In order to answer these questions we have partnered with a Swiss utility, which has recently introduced a green electricity default contract, to conduct a field study. The study will be administered via a questionnaire, which will be sent out to a randomly selected sample of customers. At the core of this questionnaire, customers need to select their preferred electricity contract in absence of a default. We can then assess the share of matches and mismatches with the actual contract choice. Combining this data with the responses to who sticks to a default and why will shed light on the highly policy-relevant but so-far under-researched issue of distributional effects of green electricity defaults. Data collection is currently underway.

Bio:

Renate Schubert is a Professor for Economics at ETH Zurich where she founded the interdisciplinary Institute for Environmental Decisions (IED). She worked for the Scientific Council to the German Ministry for Economic Cooperation and Development and was a member of the Swiss Council for Development and Cooperation. For more than ten years she was on the Board of the Swiss National Science Foundation and on the Decision Boards of the German Science Foundation. R. Schubert was appointed to the German Advisory Council on Global Change (WBGU), which she chaired several years. She was a member and head of the External Advisory Board of the Center for Research on Environmental Decisions (CRED) at Columbia University and a member of the Advisory Board of the Rachel Carson Center in Munich. Currently, R. Schubert is running a project on private households' energy efficiency in Singapore. She mainly deals with behavioral economics topics applied to environmental and energy related behavior of private households.

1.4 International

Chair: Koichi Hamada

Wing Thye Woo; UC Davis

International Economic Architecture in a Multi-Polar World

The talk will focus on questions like:

- (a) What is the relationship between international economic architecture and the nature of the global political order?
- (b) What is the future of globalization?
- (c) What is the China factor?
- (c) What will be the likely role for ASEAN in the emerging international economic architecture?

Bio:

Wing Thye Woo is Professor at University of California at Davis; Research Professor at Sunway University in Kuala Lumpur (heading the Jeffrey Cheah

Institute on Southeast Asia and the Jeffrey Sachs Center on Sustainable Development); Professor at Fudan University in Shanghai, Professor at the Institute of Population and Labor Economics of the Chinese Academy of Social Sciences in Beijing; Distinguished Fellow at the Penang Institute; and Director of the East Asian Program within the Center for Sustainable Development at Columbia University. His current research focuses on macroeconomic management of open economies; and on the growth challenges (e.g. the middle-income trap, and the Sustainable Development Goals) of the East Asian economies, particularly, China, Indonesia and Malaysia. Wing's publications include *Macroeconomic Crisis and Long-Term Growth: The Case of Indonesia, 1965-1990* (World Bank Press, 1994), *Ranking the Liveability of the Major Cities in the World* (World Scientific, 2012), and *A New Global Reserve System for a Transformed Global Economy Component* (MIT Press, forthcoming). Wing's article "The Monetary Approach to Exchange Rate Determination under Rational Expectations: The Dollar-Deutschemark Case," *Journal of International Economics*, February 1985, was identified by JIE in 2000 to be one of the twenty-five most cited articles in its 30 years of history. He was a consultant to the comprehensive tax and exchange rate reforms implemented by China in January 1994 (*Fiscal Management and Economic Reform in the People's Republic of China*, Oxford University Press, 1995). From 1994-96, he led an international team (which included Leszek Balcerowicz, Boris Fedorov, Fan Gang and Jeffrey D. Sachs) to study the reform experiences of centrally-planned economies (*Economies in Transition: Comparing Asia and Europe*, MIT Press, 1997). During 1997-1998, Wing served as a special advisor to the U.S. Treasury; and he headed the project "Asia Competitiveness Report 1999" to analyse the Asian financial crisis for the World Economic Forum in Davos, Switzerland, February 1999 (*The Asian Financial Crisis: Lessons for a Resilient Asia*, MIT Press, 2000). From 2002-2005, Wing was the Special Advisor for East Asian Economies in the Millennium Project of the United Nations. In July 2005, he was appointed to the International Advisory Panel to Prime Minister Abdullah Badawi of Malaysia; and he was the Executive Director of the Penang Institute in

Malaysia in 2012-2013. In 2001, Wing helped to establish the Asian Economic Panel (AEP), a forum of 80 specialists on Asian economies which meets tri-annually to discuss important Asian economic issues and publishes the *Asian Economic Papers*, MIT Press (of which Wing is the Editor-in-Chief). He was President of the Chinese Economists Association of North America (CEANA) in 2001-2002, and was President of the Chinese Economists Society (CES) in 2015-2016. In 2004, the University of California at Davis awarded him its

Distinguished Scholarly Public Service Award; in 2006, he was appointed a *Chang Jiang* Professor by the Ministry of Education of China; in 2009, the Governor of Penang awarded him the chivalry order of *Darjah Setia Pangkuan Negeri*, which bestows on him the title *Dato*; and in 2016, he was appointed a National Distinguished Expert under the Thousand Talents Program of China.

Larry Dongxiao Qiu; The University of Hong Kong

Joint Venture Choice, Market Share Rivalry, and Spillovers: Evidence from China

International joint ventures are a major vehicle through which foreign investment is conducted. These joint ventures are particularly prominent in the Chinese market, where foreign firms are often required by law to partner with a Chinese firm in establishing operations in the country. Within the broader context of foreign direct investment and multinational enterprises, international joint ventures have rarely been studied on their own. We begin by studying the determinants of joint venture formation, finding that Chinese firms that are chosen to participate in a joint venture tend to be larger, more productive, and more innovative than other Chinese firms. Second, we show that after entering the joint venture Chinese firms innovate more than they did before entering the joint venture, and they also sell more both at home and abroad. Third, international joint ventures affect the rate of innovation of other Chinese firms in two ways: one, joint ventures increase the degree of competition in the race for new patents, thereby lowering their patenting rate. Two, joint ventures generate technology spillovers to other Chinese firms, which raises their rate of patenting. While all Chinese firms experience negative competition effects from international joint ventures, only the relatively strong firms—those with the required absorptive capacity-- benefit from technology spillovers that international joint ventures generate. Furthermore, we find that both competition and spillover effects are relatively strong with joint ventures with Japanese and especially US firms, as opposed to firms from Hong Kong, Macao, and Taiwan.

Bio:

Larry Qiu received his bachelor degree (in 1983) in mathematics from Zhongshan University, and both a master degree (in 1989) and a PhD degree (in 1993) in economics from University of British Columbia, Canada. Larry joined the Hong Kong University of Science and Technology as an assistant professor

in 1993 and later became an associate professor and full professor. He joined the University of Hong Kong as a full professor in January 2008. He holds visiting professor/scholar positions in many academic institutions. He has published widely in international economics journals and books. His research interests include international trade and policy, foreign direct investment, mergers and acquisitions, and industrial organization. He has taught undergraduate, graduate, MBA, EMBA, and executive training courses on various topics. Larry serves on the editorial board of many academic journals. He is an associate editor of *International Economics*. He is the president of Hong Kong Economic Association. He is currently Associated Dean (Knowledge Exchange) and Director of Executive Education, the Faculty of Business and Economics, HKU. He is an associate director of Institute of China and Global Development, HKU. Larry has been invited by The Royal Swedish Academy of Sciences to nominate candidates for Nobel Prize in Economics Sciences in 2011-15. He is a biographee of *Marquis Who's Who in America*, (2004, 2007), *Marquis Who's Who in the World*, 19th Edition (2001), and 2000 Outstanding Intellectuals of the 21st Century, 2nd edition, IBC. Larry currently serves as an independent non-executive director at the board of Guangzhou Security and Hang Seng Bank Security Joint Venture.

1.5 Public Policy and Welfare

Chair: Chew Soon Beng

Lars Lefgren; Brigham Young University

Self-Harm as an Optimal Distraction

We develop a model of utility in which individuals are able to focus on a limited number of latent stimuli. In the simplest case, each stimulus is indexed by utility and salience. An individual experiences the utility associated with stimulus with the highest salience. In this setting, individuals may wish to engage in harmful behavior to distract themselves from other, more painful, but less salient stimuli. This model rationalizes behavior such as cutting, substance abuse, and risky sexual behavior as constrained optimal distractions in settings with other severely distressing, but less salient, stimuli. Our model makes testable empirical predictions, which we validate in an experimental setting.

Bio:

Dr. Lefgren completed his PhD in Business Economics from the University of Chicago in 2001. He currently holds a Camilla Eyring-Kimball Professorship in the economics department of Brigham Young University. Dr. Lefgren has published articles on a variety of topics including education policy, crime, and intergenerational mobility. He has published in journals including the *American Economic Review*, the *Journal of Political Economy*, and the *Quarterly Journal of Economics*. He is married to Kimberly Lefgren and the proud father of four children.

Chong Yah Lim

Full Employment, Unemployment, and Public Policy

With the help of a diagram, the author explains the use of monetary and fiscal policy to fight necessary gaps of unemployment and negative GDP growth rates. The limitations of using the neo-Keynesian economic model are also discussed. The author then uses the model to explain the continued very harsh unemployment rates of Spain and Greece and the success of the counter-vailing measures against the recent Global Recession faced by many economies across the globe.

Bio:

Born in Malacca, Professor **LIM Chong Yah** received his BA in Economics, Statistics and English Literature and BA Honours in Economics at the then University of Malaya in Singapore under a Malacca Straits Settlement Scholarship in the early 1950s and his PhD in Economics from Oxford University under a British Commonwealth Scholarship. Professor Lim was the founding Head of the Division of Applied Economics, University of Malaya in Kuala Lumpur. He later worked as the Dean of the Faculty of Arts and Social Sciences and the Head of the Department of Economics and Statistics of the National University of Singapore (NUS) from 1971 to 1992, while he concurrently served as the President of the Economic Society of Singapore for 18 years and as the Editor of the *Singapore Economic Review* for 13 years. After his retirement from NUS as Senior Professor in 1992, Professor Lim joined Nanyang Technological University (NTU) as Professor of Economics, promoted

to the Albert Winsemius Chair Professor of Economics, and continued to work enthusiastically both in academia and in public service for another two decades. Professor Lim has produced 30 books (including his autobiography published in 2017), 39 chapters in books, 51 articles in refereed academic journals and 74 international conference papers. He is the creator and proponent of the EGOIN Theory, the Triple C Theory and the S Curve Hypothesis to explain the poverty and affluence of modern nations and the differences in their rates of economic advance. For his important contributions to economic and national development of Singapore as founding Chairman of the National Wages Council (1972 – 2001) and the Skills Development Fund Advisory Council (1979 – 1982), the Singapore Government awarded him with three awards: the *Public Service Star* in 1976, the *Meritorious Service Medal* in 1983, and the *Distinguished Service Order* in 2000. Singapore's National Trade Unions Congress (NTUC) also conferred on him three awards in 1985, 1999, and 2011. In addition, the Economic Society of Indonesia (Ikatan Sarjana Ekonomi Indonesia) conferred on him the distinguished founder's medal for initiating and co-founding the Federation of ASEAN Economic Associations (FAEA). For his distinguished services to the university and lifelong contributions to research, higher education, and Singapore's economic development, NUS conferred on him the Emeritus Professorship and established through public donations in 2001 a *Lim Chong Yah Professorship* in its Faculty of Arts and Social Sciences. NTU also conferred on him the Emeritus Professorship upon his retirement at 80 from the university in 2012.

Session 2.1

Chair: Malcolm Rutherford

Lin Zhang; Henan University

Macroeconomic Trade Effects of Vehicle Currencies: Evidence from 19th Century China

We use the Chinese experience between 1867 and 1910 to illustrate how the volatility of vehicle currencies affects trade. Today's widespread vehicle currency is the dollar. However, the macroeconomic effects of this use of the dollar have rarely been addressed. This is partly due to identification problems caused by its international importance. China had adopted a system, where silver was used almost exclusively for trade, similar to a vehicle currency. While being important for China, the global role of silver was marginal, alleviating said identification problems. We develop a bias corrected structural VAR showing that silver price fluctuations significantly affected trade. We find that silver price shocks have exerted significant effects on Chinese trade. Our findings provide useful implications for the effects of value changes in vehicle currency on the emerging markets.

Dan Li; Fudan University

Reputation Building Of A Nascent Government In Debt Financing: Lessons From The Bond Market In China, 1912-37

This paper documents the development of the government bond market in Pre-War China (1912-1937). Interestingly, the secondary market for government bonds thrived in terms of its size and liquidity during the early Nationalist Era (1927-31) and declined later. Why did investors finance a nascent military government plagued by warfare? We find that the Nationalist government settled its predecessors' debts and consistently serviced its debts even it was still in a war to unify China. By doing so, the government successfully distinguished itself from its predecessors, which were serial defaulters, at the first place. Accordingly, the government was able to float more bonds in the secondary market. When the government partially defaulted on its debts later, investors declined its access to the market. Moreover, we support our argument by

empirically show that government reputation is important to determine the likelihood to float a bond in the secondary market and to determine the price of their outstanding bonds traded in the secondary market. We suggest that our results is consistent with the implications from the literature of sovereign debt default, and other competing explanations do not fit the observed empirical pattern. Our study sheds light on the puzzling facts that why some nascent governments with undemocratic political institution and weak investor protection can still borrow from the public.

Ichiro Sugimoto; Soka University

Methodology Of Deriving The Annual Opium Consumption In The Colony Of Singapore And Its Impact To Government Revenue Earnings And Portfolio-financial Investment

This paper firstly provide methodology of deriving the annual opium consumption expenditure in the Colony of Singapore. Based on this derived time-series data, elaborate its contributions to government revenue earnings and government portfolio financial investment. Opium consumption in Singapore prior to World War II was not unlawful and data pertaining to household consumption of opium could be obtained from various official sources. However, after World War II with household opium consumption not being sanctioned by the government, there was no data available whatsoever on the household consumption of opium. The distribution and sale of opium in Singapore prior to World War II had experienced many transitions. Purchases and sales of opium were entirely operated by Chinese revenue farms since the early nineteenth century. It was not until 1910 that the British colonial authority took over the right for purchasing and selling opium from Chinese revenue farms. Nevertheless, a majority of retail shops that sold opium to consumers were operated by licensed private (Chinese) retailers. At the same time, Singapore gradually increased government-owned retail shops. Between 1910 and 1926, the proportion of government retail shops increased significantly. Eventually, licensed private retail shops were abolished by 1926 and fully monopolized by the government. For the computation of the opium consumption in Singapore, three different procedures were applied based on the availability of data on opium consumption. For the period 1880-1922, statistical information on the quantity of opium sold to consumers and its retail price was utilized. Subsequently, due to the deficiencies of information on quantity sold and retail

prices, government revenue figures on the sales of opium were utilized to estimate the opium consumption for the period 1923-25. The revenue figures for this period were estimated using a combination of (i) government receipts from sales of opium to consumers in retail prices and (ii) government receipts from sales of opium to licenced private retail shops at wholesale prices. The wholesale price was then adjusted to obtain the retail price. For the remaining period between 1926-39 the figures pertaining to government revenue from the sale of opium to household consumers were directly obtained from the Annual Report, Government Monopoly Department, Straits Settlements. Unlike other British colonial territories which relied on export duties, Singapore as a free port relied heavily on trade for its economic activities. Under these circumstances, the colonial authority could not impose any export duties as their revenue source. Alternatively, the colonial authority needed to rely on the revenue collection from the sales of opium. More than half of the entire revenue came from this single revenue source during the 1900-20's. Nevertheless, its reliance on opium sales as a revenue source reduced gradually over the period. The revenue from opium was paid into the "Opium Revenue Replacement Fund" for each year and the money invested in securities abroad. More importantly, the British colonial authority ceased to depend on opium revenue by abolishing the opium sales immediately after the end of World War II.

Session 2.2

Chair: Chan Kee Low

Kai-yin Woo; Hong Kong Shue Yan University

Testing for Cointegration of PPP: Evidence from China and her Asian trading partners along the ‘One Belt One Road’ routes

The Chinese Government has proposed the ‘One Belt, One Road (OBOR) Initiative’ with the purpose of increasing trade flows and the economic integration among the participating countries along the OBOR routes. According to the theory of purchasing power parity (PPP), if there is evidence of cointegration among nominal exchange rate, prices of China and other Belt and Road countries, trade arbitrages will promote economic convergence. PPP is commonly used as a measure of economic integration. Validity of PPP reflects well-integrated goods markets in which free flows of goods across countries are possible, and this can be considered as a pre-condition for an economic union or optimal currency area (OCA), which requires a higher-level economic cooperation. While market frictions cause nonlinearities in the adjustment mechanism of their real exchange rates towards the PPP equilibrium levels, we adopt a residual-based threshold cointegration method that allows for three-regime asymmetric adjustments and also help estimate the transaction costs from the thresholds. Our data samples focus upon China’s Belt and Road trading partners in Asian regions. Our results support some evidence of PPP between China and her trading partners along the Asian OBOR routes. It provides important information for policy makers to prioritize and select specific Belt and Road countries for joining the economic union or OCA with China in the future.

Cindy Shin-Huei Wang; National Tsing Hua University and Catholique Universite de Louvain

New Solutions Of The Imbalance Regressions With Their Applications To Two Finance Puzzles

In this paper, we derive several simple estimations, namely the GCO-AR class estimations, for the imbalance regression where we allow the orders of both sides (the right hand and left hand sides) of the regression to be $I(0)$, $I(1)$ or $I(d)$

processes (long memory processes) but are not equal to each other. We show that a convergent usual t-statistic based on our new estimator can be constructed for the imbalance regression cases analyzed by Baillie and Bollerslev (2000). The implementation of our estimator is easy since it does not necessitate estimation of the long-run variance. All simulations provide the evidence on the usefulness of our methodology. We then employ our new estimation to re-examine two popular finance issues: the forward discount anomaly and equity premium puzzle. Even More importantly, with our methodology, we provide striking evidences overturning the typical findings in the existing literature: (i) there truly exists the forward rate unbiasedness hypothesis (FRUH) for some countries such as France, Japan, Great Britain and Italy; (ii) several commonly used predictive variables, including the earnings price ratio (E/P), the dividend payout ratio (D/E), the inflation rate (INFL), the book-to-market ratio (B/M), the unemployment rate (UME), the treasury bill rate (TBL), the net equity expansion (NTIS), the long term yield (LTY), the industrial production (IP), the stock variance (SVAR) and the term spread (TMS), indeed exhibit substantial out-of-sample forecasting power for excess equity returns.

Chung Yan Sam; CenPRIS, Sookhoon Goh; Universiti Sains Malaysia

Bootstrapping The Autoregressive Distributed Lag Test For Cointegration

The paper proposes a bootstrap ARDL test. By applying the appropriate bootstrap method, some weaknesses underlying the Pesaran et al. (2001) test are addressed including size and power properties and the elimination of inconclusive inferences. In addition, inferences based solely on the significance of the F-test and single t-test of Pesaran et al. (2001) are not sufficient to avoid degenerate cases. The bootstrap ARDL provides an additional test on the significance of coefficients on lagged levels of the regressors, which provides a better insight on the cointegration status of the model.

Session 2.3

Chair: Takatoshi Ito

Adem Baltaci; Istanbul Medeniyet University, Ali Ari; Kirklareli University, Raif Cergibozan; Kirklareli University

Impact of Cultural Values on Financial Crises: An Empirical Investigation

Several crises episodes hit both emerging and developed countries over the last three decades. Hence, numerous theoretical and empirical models have been built to explain these repeated crisis episodes. The empirical studies generally focus on macroeconomic and financial factors as explanatory variables. However, socio-psychological factors affecting decisions of economic agents that surely play an important role in the occurrence of financial crises are totally ignored. Contrary to early empirical papers, this study, thus, aims to empirically investigate the role of cultural values that shape decision-making of economic agents through the 2007-08 global financial crisis by using Self-Organizing Maps and logistic regression model in a panel set of 38 countries. The results indicate that crisis probability is higher in countries where power distance is low; masculinity, individualism and uncertainty avoidance are high. Moreover, increases in budget and trade deficits, decreases in central bank reserves and economic growth, rising bank non-performing loans and falling bank reserves are other significant variables in the occurrence of the 2007-08 global financial crisis.

Omar Bashar; Deakin University

Cross-country Differences In The Impacts Of The Global Financial Crisis: Were Resource-rich Countries Hurt Less Than Others?

This study examines the cross-country differences in the impacts of the Global Financial Crisis (GFC) with a particular focus on the role of the resource boom. Using the forecasts from the unobserved components model and exponential smoothing technique, we estimate the output level a country would reach in 2009 and 2013 in the absence of the GFC and compare these with the realized output levels. From these we compute the proportions of lost output due to the GFC for 72 countries and we find large variations in the output loss across these countries. The estimation results strongly suggest that the mineral-rich countries were in a strong position to survive any adverse shocks stemming from the GFC. We find somewhat weak evidence of the positive role of energy rents in reducing the adverse effects of the GFC. Income per capita, fiscal policy management and

government effectiveness are also found to be the key factors determining the differences in the output loss in post-crisis period.

Viet Nguyen; University of Melbourne

What's Mine is Yours: Sovereign Risk Transmission during the European Debt Crisis

We develop an empirical network model to study bilateral sovereign credit risk spillovers during the European debt crisis. We show that the spillover density is typically asymmetric with heavy tails. This confounds efforts to track time-variation in spillover activity using the mean-based summary statistics that are widespread in the literature. Density-based measures - specifically divergence criteria - yield stronger and timelier signals of changes in spillover activity than mean-based measures. This is particularly apparent for sovereign bailouts, which principally affect the tails of the spillover density. Consequently, density-based measures provide valuable additional information about changes in the credit risk environment.

Session 2.4

Chair: Giovanni Ko

Masatoshi Jinno; Kanto-gakuin, University

Calculating The Net Benefit Of Admitting Immigrant Under The Defined-return-ratio Pay-as-you-go Pension System

This study analyzes the effect of immigration on the native generational welfare through the pay-as-you-go pension system with the rate of return of pension premiums constant by incorporating the costs of assimilation borne by the next generation. We also show that an accepting immigrant improves a smoothing transition from the pay-as-you-go to the funded pension system.

Kim-Heng Tan; Nanyang Technological University

Optimal Social Security: A Dollar is Not a Dollar in Income Transfers

Feldstein (1985) studies the optimal provision of the pay-as-you-go (PAYG) system of social security when agents are myopic. A basic insight from his study is that the optimal policy requires the protection of those who are myopic in saving to be balanced against the losses arising from those who have to pay for the costs. The objective of this paper is to study the optimal policy of social security under the PAYG system when agents are not myopic and fully rational. This study is based on Chapter 7 of my book, *Fiscal Policy in Dynamic Economies*, published in 2016 by Routledge. As the ideas in the chapter are new and the book is published only recently, I hope to be able to communicate my ideas to a larger audience in this conference. The basic insight from this paper is that the optimal policy requires the gains from transferring income from workers to retirees due to the diminishing marginal utility of income to be balanced against the costs of social security. Of course, it would have been trivial if the diminishing marginal utility of income is assumed outright and optimality is attained by balancing the gains from transferring income from workers to retirees against the cost of income transfers. What is novel in our paper is to allow the diminishing marginal utility of income to emerge from our analysis as a consequence of the economy being in a second-best world. Ng (1984) has argued cogently for a dollar to be treated as a dollar on efficiency grounds.

Based on efficiency, however, we show that there exist gains from transferring income from workers, who have more income and a lower marginal utility of income, to retirees, who have less income and a higher marginal utility of income, whenever the economy is away from the golden rule of capital accumulation. The significance of our finding is that policy makers should exploit the diminishing marginal utility of income in determining optimal social security and that failure to do so will result in a sub-optimal state of affairs.

Hirofumi Kurokawa; Doshisha University, Tomoharu Mori; Kansai University, Fumio Ohtake; Osaka University

A Choice Experiment On Taxes: Are Income And Consumption Taxes Equivalent?

We test the equivalence of income and consumption taxes through a choice experiment. Under a given set of income and consumption parameters, subjects were asked to choose among an income tax of 20%, a consumption tax of 25% (which is an equivalent tax burden), a consumption tax of 22%, and a consumption tax of 20%. Our results showed that subjects prefer income tax to consumption tax when the nominal consumption tax rate is higher than the nominal income tax rate. However, subjects tend to prefer consumption tax to income tax when the nominal tax rates are identical. Our result, that subjects prefer income tax to consumption tax despite a higher tax burden, implies the consumption tax miscalculation bias. The consumption tax miscalculation bias is one where subjects miscalculate the amount of consumption tax as if it is declared by tax inclusive, as in the case of income tax, despite consumption tax being tax exclusive. If the income tax burden is equivalent to the consumption tax burden, subjects prefer income tax. This result implies that income and consumption taxes are not equivalent due to the consumption tax miscalculation bias.

Session 2.5

Chair: Naoyuki Yoshino

Naoyuki Yoshino, Dean, ADBI

Determinants and impacts of financial literacy in Japan

Peter Morgan, Senior Consulting Economist, ADBI

Mortgage lending, banking crises and financial stability in Asia

Bihong Huang, Research Fellow, ADBI

Housing Market and Government Regulation: Evidence from China's Home Purchase Restriction Policy

Session 2.8

Chair: Kaiwen Leong

Andreas Knorr; German Univ. of Administrative Sciences, Alexander Eisenkopf; Zeppelin University

Big Data, Customer Relationship and Revenue Management in the Airline: What Future Role for Frequent Flyer Programs?

Commercial airlines were big data pioneers by establishing loyalty programs long before other sectors, especially retailing. The airline industry's frequent-flyer programmes (FFP) have not only been among the most successful loyalty schemes in business history. By trying to achieve profit-maximization by creating a loyal, and transparent, customer base in return for award travel opportunities and 'elite status' amenities, airlines have seen the enrolment rates into their FFPs skyrocket since they were first introduced by United Airlines in 1972, and quickly became an industry standard worldwide.

In the meantime, however, the term frequent-flyer programme has become somewhat misleading as earning and redemption opportunities have long transcended the airline industry; in fact, these are also offered by plenty of program partners from other branches such as credit card companies and other financial service providers, rental car companies, hotel chains, media outlets and a large network of retailers, all of whom have paid for access to the leading FFPs to tap the enormous amount of highly personalized data accumulated there in order to identify and benefit from cross-selling opportunities. But also the airlines have profited massively from their cooperation with outside commercial partners through the substantially increased amount of commercially valuable personalized data which permit them to much improve their passenger profiling capabilities way beyond of what they could achieve using internal data on historical flight search and booking patterns alone (itineraries, booking classes, add-on bookings of ancillary services etc.). In a nutshell, 'big data' availability combined with the airlines' vastly advanced data analytics techniques has enabled them to engage in real-time customer intelligence and, as an immediate result, in one-to-one personalized marketing and first-degree price discrimination (i.e. personalized pricing) on a historically unprecedented scale. It should not be overlooked, however, that an increasing share of the data which are valuable for airlines is now generated outside the traditional FFP environment as FFPs

essentially record only past travel and consumption behaviour (with the exception of existing future bookings, once the FFP membership number has already been added to the booking) with limited predictive powers. In particular, (meta) search engines and airline websites (which have grown into comprehensive travel-related portals), are quickly becoming effective real-time tracking devices with respect to passengers' search and booking behaviour – including data on aborted searches and bookings which are also crucial to fine-tuning consumer profiles. The emergence of complementary data sources raises the important question on the future role of FFPs in airlines' consumer relationship marketing and revenue management strategies. It will be explored in this paper. The research hypothesis is that the increasing availability of key data outside traditional FFPs will reduce their value as a tool to create and maintain customer loyalty. Our main finding is that big data availability has strongly improved the airlines' inventory and revenue management capabilities, effectively allowing airlines to 'inflate away' FFP award availabilities, to the detriment of FFP members. In fact, the amount of miles/points required for redemption (in addition to the requirement to pay numerous fees, charges and surcharges to obtain a previously free award ticket) has been pushed up massively by airlines; also, earning opportunities for paid tickets and to obtain or maintain 'elite status' perks have been continuously reduced and became much more aligned with the revenues generated by individual tickets, often complemented with annual minimum spend requirements to (re)qualify.

Haifeng Fu; Xi'an Jiaotong-Liverpool University

Pure Strategy Equilibria and Some Refinements in Games with Public and Private Information

In a Bayesian framework with public and private information that allows countably many players and infinitely many actions, we provide three sufficient conditions that ensure the existence of a pure-strategy Bayes-Nash equilibrium under the usual diffuseness and disparateness assumptions: every player has (i) a countable action set, or (ii) a countable set of interim characteristics conditioned on a public signal, or (iii) a relatively-diffuse strategy-relevant private information space conditioned on a public signal. We also discuss existence of Pareto-undominated and socially-maximal equilibria in pure strategies. Our results rely on the theory of distributions of correspondences with infinite-

dimensional range and draw on notions of nowhere equivalence, relative saturation, local saturation, and saturation.

Aloysius Siow; University of Toronto, Tanjim Hossain; University of Toronto, Elizabeth Lyons; University of California, San Diego

How Organization Design affects Fairness and Efficiency in Bargaining

Economists presuppose that in one shot full information environments without contractual friction, income effects or impediment to bargaining, individuals who have a profitable opportunity to work together, will do so. This project investigates this presupposition in a laboratory setting. Our experiments show that the framing of a joint production opportunity, whether as a partnership or employment relationship, affects both productive efficiency and distribution. Employment relationships resulted in higher but less equitable payoffs for participants. Subject employers did not get higher payoffs than subject employees.

Session 3.1

Chair: Larry Dongxiao Qiu

Yukio Karasawa-Ohtashiro; Nanzan University

Host Country's FDI Regulations, Multinational Enterprises' Entry Strategies, And Mixed Markets

How should a welfare-maximizing government regulate the entry of multinational enterprises (MNEs) into former public monopolies? We demonstrate that when MNEs compete in the host market, it can be optimal to the host country to impose common regulations on foreign direct investment (FDI), namely, (i) mandating MNEs to enter through international joint ventures (IJVs), (ii) equity restrictions on foreign ownership in the IJVs, and (iii) a simultaneous ban on imports. When the MNEs insist on high degrees of foreign ownership, restricting their entry to exports only would be optimal. Moreover, it would be optimal not to allow greenfield investment.

Chul-Woo Kwon; Kyungpook National University, Yongsik Jeon; Korea Insurance Research Institute

Offshoring, The Threat Effect, And Wage Inequality

The effects of offshoring threats to the domestic skill premium are widely accepted but theoretically and empirically untested. This study examines the effects of a firm's offshoring threat on domestic skill premium by constructing a simple theoretical model based on the task-trading offshoring and collective wage-bargaining models. Assuming skilled and unskilled labor are complementary inputs, the results of the theoretical analysis find that, for the moderate size of the demand for the final good, the threat of offshoring of unskilled labor could reduce the wages of domestic unskilled workers more than it could reduce the wages of domestic skilled workers. Thus, the skill premium is increased even when there is no actual offshoring. Furthermore, domestic production featuring the threat effect could serve as industry equilibrium for the moderate size of relative set-up cost to establish foreign production facilities.

D P Priyadarshi Joshi; University of Hyderabad

Trade, Employment And Productivity Nexus: An Examination In Post Reforms India

The impact of trade on the employment generation and productivity growth is one of the most debated topics in the Indian economic research. Most of the studies have concluded a growth in the productivity in the post reforms period. But, these studies have not taken into the fact whether the growth is reaped from improved domestically produced inputs or from the imported intermediate goods. Goldar (2015) raised concern about continuously increasing share of imported materials to the total material consumed and the myth of technological advancement. Further, the positive impact of the increase in the export is being nullified by the negative effect of increase in the imports on the employment generation. The change in the composition of trade especially the declining share of the labour intensive products in the exports causes a rather slow employment growth. So in the liberalization period, the question of jobless growth becomes important. Economic survey, 2016-17 emphasised on the low-skilled labour intensive sectors like the textile and leather to promote industrial employment and grab the comparative advantages in the world market. The paper found a rather slow employment growth because of the changing composition of trade away from the labour intensive manufacturing and because of the negative effect of labour coefficient. The paper used the national input-output tables for India, prepared by World Input Output Database (WIOD), and KLEMS database on India to seek a measure of productivity growth, employment growth and its nexus with international trade.

Yang Xu; University of Maryland, College Park

Structural Change and Skill Premium in a Quantitative Model of Trade

I develop a multi-country general equilibrium trade model to investigate the effects of international trade and technical change on structural change and the skill premium. In my three-sector framework, trade and technical change affect structural change by altering the household and intermediate expenditure shares for each sector. Sectors differ in their skill intensity, so that reallocation to skill intensive sectors increases the skill premium. I apply the framework to 37 countries, and the model replicates the changes in trade shares, production shares, consumption shares, and skill premium from 1997 to 2007. I find that (1)

trade increased the skill premium in all countries; (2) trade and technical change each explains half of the increase in skill premium in countries where both channels contributed positively; (3) the underlying force of trade increasing the skill premium is higher foreign production efficiency rather than reductions in the trade costs. An application to the U.S. and China reveals that for the U.S., (1) trade with China explains more than half of the decline in manufacturing share; (2) trade and technical change together reallocate 1.6% of skilled workers out of the shrinking manufacturing sector, but by only 0.2% for unskilled workers.

Session 3.2

Chair: Yuk-Fai Fong

Soo Jin Kim; Michigan State University

Privacy, Information Acquisition, And Market Competition

This paper analyzes how personal information in a two-sided market where sellers target advertise to individuals with varying privacy concerns affects market outcomes. I focus on how a market entrant that has worse targeting technology than an incumbent is disproportionately affected by a lack of information. I show that an entrant always purchases data to overcome its initial targeting disadvantage, whereas the incumbent only does so when consumers are relatively privacy-sensitive. When the incumbent also buys data, the entrant suffers from lower market share. With regard to data-driven vertical integration between the platform and a seller, the platform and incumbent will merge if consumers become more privacy-sensitive and always prevent the unaffiliated entrant from obtaining data access. Overall, an entrant is disproportionately affected by consumer's privacy concerns. The welfare analysis shows that privacy concerns and the resulting market outcomes lower consumer surplus and social welfare. Therefore, individually optimal decisions on data disclosure might not be socially optimal when aggregated.

Dmitry Shapiro; Seoul National University, David Huh; George Washington University

Voluntary Disclosure of Negative Information and Its Effect on Competition

Contrary to conventional wisdom that sharing negative information hurts, many sellers voluntarily disclose weaknesses of their products in markets where information asymmetry is high. This paper provides an explanation on this type of seller's honesty by developing a framework where sellers with low-quality products can benefit from a disclosure of negative information. We consider a lemon-market model where the product's quality is unobservable by buyers and buyers dislike the risk associated with purchasing the product of uncertain quality. Sellers can send a cheap-talk message indicating whether their quality is

high or low. We describe equilibria where with positive probability low-quality sellers voluntarily disclose negative information about their product. The disclosure is beneficial for sellers as it results in product differentiation: there is no quality uncertainty about products labeled as low quality while there is uncertainty about products labeled as high-quality.

**Yuta Inoue; Waseda University, Koji Shirai; Kwansai Gakuin University
Limited Consideration And Limited Data**

This paper develops revealed preference tests for choices under limited consideration, allowing a partially observed data set. Our tests cover leading theories in the literature including the limited attention model, the rationalization model, the categorize-then-choose model, and the rational shortlisting model. It is worth noting that all our tests exploit a common structure of limited consideration models. We start from a data set collected from a single agent, and then extend the analysis to panel data in which the coincidence of consideration sets/preferences of agents are tested.

Pak Hung Au; Nanyang Technological University, Bin Chen; Sun Yat-sen University

Objective and Subjective Indicators in Interim Performance Evaluations

We study interim performance evaluations in a moral hazard setting with limited liability and two stages of production. At the end of the first stage, both an objective signal (publicly observed) and a subjective signal (privately observed by the principal) realize. We show that in the optimal contract, the two signals are used interactively with three notable features. First, whereas the objective signal is always used, the subjective signal is used only if the realized value of objective signal is below a cutoff. Second, this cutoff is increasing in the severity of either the first-stage or second-stage moral hazard problem. Third, the solicited effort may exhibit an upward distortion (relative to the first best) for an intermediate region of the objective signal realizations.

Session 3.3

Chair: Justin Lin

Xiaoping Chen; Nanyang Technological University, Yuchen Shao; Nanjing University, Lianming Zhu; Waseda University

FDI and Firm Innovation

This paper investigates the effect of FDI on domestic firms' innovation activities, making use of China's FDI deregulation in certain industries after its accession to WTO. By employing matched firm-level survey and patent application data in China over 1998-2007, we find that the FDI significantly increases domestic firms' innovation. Moreover, this positive impact is more pronounced for relatively low-productivity firms, indicating a catching-up possibility for these firms. We further set up a model with heterogeneous firms and substitution between labor and innovation inputs to explain the mechanism behind these empirical findings. More FDI pushes up the factor prices and hence drives up the incentive to innovate for domestic firms.

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

Estimating Productivity of Public Infrastructure Investment

The productivity effect of public infrastructure investment is controversial in the literature using aggregate data, mainly due to reverse causality. To address the identification issue, this paper develops a model of endogenous productivity in a firm-level production function, and matches Chinese firm-level production data with province-level infrastructure investment data. A structural model is employed to further distinguish the long-run productivity effect from the short-run Keynesian demand effect of public investment. The estimated rates of return of public infrastructure investment are 9.2% and 2.5%, respectively before and after controlling for the demand effect. The returns triple once national spillover effects are taken into account. Firm-level evidences are consistent with a mechanism in which public infrastructure investment functions as a catalyst in facilitating resource reallocation from less to more productive firms.

Xiangjun Ma; University of International Business and Economics, Larry Dongxiao Qiu; University of Hong Kong, Hyelim Son; University of Seoul

Labor Skill, Industry Structure and Migration

Regional migrants consist of a large share of the labor market in China. While who selects into migration has been extensively studied, there has been absence of discussion on how heterogeneous these migrants are, particularly regarding their industry choice upon migration. In this paper, we investigate the relationship between regional migrants' industry concentration and the industry structure of the source (home) province and the host city in China. Using a unique nationwide survey data of regional migrants with more than 128000 observations in each year we find that migrants are less likely to choose industries in which their home province has comparative advantage and more likely to select into industries in which the host city has comparative advantage. To explain the empirical findings, we construct a variant of the Roy Model, which provides theoretical prediction consistent with our empirical findings.

Henry Wan, Jr.; Cornell University, An-Chi Tung; Academia Sinica

Industrial Policy: Chinese Debate and Taiwan's Foundries

Industrial policy is often deployed to influence trade and promote growth: a topic central to debates in theory and policy. This paper focuses attention on its efficacy and impact, based on logic and evidence. We reconcile the views of Stiglitz and Solow, and the opinions by Rodrik and PCAST. The latter two appraise China's policy: in cause and effect. This provides context for the Chinese academic debate of Lin and Zhang, with their merits evaluated against the record of Chinese HSR. Additional insight is drawn from available evidences regarding Taiwan's semiconductor sector on possible win-win outcomes and leap-frogging initiatives.

Session 3.4

Chair: Harald Uhlig

Amit Mittal; Indian Institute of Management, Lucknow; Ajay Garg; Indian Institute of Management, Lucknow

Private Information Implications For Acquirers And Targets

The paper present a robust theory centred in Private information to assuage event study literature and confirm with Acquirer gains in Bank M&A. The ability of larger firms lies in investments in Intellectual capital, harnessing soft information and critically, purloin value in the deal through bargaining based on its own and the Target's specific Private information. Recent literature has affirmed that private targets within the core industry generate Positive returns for acquirers, realising the value of Private information through deal making. Recent evidence from large Bank mergers producing large Bidder gains and the robust theory of private information presented herein is likely to renew confidence in the merger and acquisitions strategy and deflect from other unseemly theoretic literature relying on earlier analysis reflecting on event studies as a tool and on the effectiveness of M&A strategies for these acquirers based in negative gains in the Event study literature. The paper presents theoretic models centered around private information of both acquirer and targets and defend a robust theory supporting the large impact strategy of Mergers evidenced in Horizontal mergers in line with recent literature.

Harold Glenn Valera; International Rice Research Institute

Gender, Technological Innovation In Agriculture, Risk Tolerance And Credit Utilization

We examine whether the gender gap in the adoption of an innovative rice variety that is flood and drought tolerant can be partly explained by differences in risk tolerance and credit utilization. Our study provides new perspectives by distinguishing between three groups of farmers according to their tendency to adopt drought and tolerant rice varieties: early adopters, innovators and laggards. In contrast to previous studies, we focus on the gender gap in the adoption behavior, risk taking and credit utilization. Our data is from Odisha household survey that we conducted in January-February 2017. The sample consists of 1500 farmers, which we draw from villages in flood-and drought-prone areas of five representative districts. The survey contains questions on the adoption and

non-adoption of drought and flood tolerant rice varieties between 2014 and 2016 Kharif season. We also ask a question on risk attitudes in which the respondents assess their willingness to take risk in trying new rice varieties (on a ten-point scale). We employ this as our risk tolerance score. The survey also contains information on credit utilization, and further socio-economic data. We then studied the ‘gender effect’ over each of the groups of adopters defined above after controlling for the influence of other exogenous variables. We find that gender still explains many differences in the adoption of a drought-and flood-tolerant rice variety after controlling for risk tolerance, credit utilization, and other socio-economic variables.

Siong Hook Law; Universiti Putra Malaysia

The Effect Of Transparency On Financial Development

This Study examines the effect of transparency on financial development in developing countries using innovative dynamic panel threshold estimations. Private sector credit and stock market capitalization are used as measures of financial development. Three transparency indexes are utilized: aggregate transparency index and two sub-disaggregate indices namely information transparency and accountability transparency. The sample period is covering from 1980 to 2010. The empirical results reveal that the transparency index is insignificant in influencing private sector credit or the banking sector. The impact of transparency is more apparent in stock market development where adequate information transparency and accountability transparency are crucial in promoting the stock market. However, after passing the threshold level, the effect tends to diminish. This finding suggests that the effect is greater below the threshold level compared to above the threshold level. We also divide the sample countries into four regions namely Asia, Europe, Africa and Latin America. The findings show that not all regions have responded towards transparency in promoting financial development. Thus, policy conclusions based on regional groups have to be viewed with caution.

Anders Johansson; Stockholm School of Economics

Political Uncertainty And Innovation In China

We hypothesize that political uncertainty has an adverse effect on investments in activities related to innovation. Combining two hand-collected data sets on changes in local government officials and research and development (R&D) activity at the firm level in China, we examine how political turnover influences investments in R&D. We find that a change in local political leaders is associated with a significant decrease in R&D activity. This result is robust to various robustness tests. The decrease is larger when the new political leader is promoted from outside the city in question. Moreover, the decrease is significantly larger for privately controlled firms, firms operating in regions characterized by weak economic institutions, and firms operating in a R&D-intensive industry. Our findings suggest that political uncertainty constitutes a central channel through which the local political process influences activities related to innovation.

Session 3.5

Chair: Chung Mo Koo

Kazuki Hiraga; Tokai University, Kengo Nutahara; Senshu University

Can The Laffer Curve For Consumption Tax Be Hump-shaped?

This paper characterizes the shape of the Laffer curve for consumption tax analytically. The Laffer curve for consumption tax can be hump-shaped if the utility function is an additively separable one in consumption and labor supply. Conversely, it cannot be hump-shaped if the utility function is the one employed by previous researchers. The difference in the utility functions has quantitatively significant effects on the peak tax rates of the Laffer curves for labor and capital income taxes.

Rodney Tyers; The University of Western Australia, Yixiao Zhou; Curtin University

Automation And Inequality With Taxes And Transfers

Technical change in key OECD countries since 1990 is examined in terms of its contributions to total factor productivity and to factor bias. The dependence of real income and inequality on changes in factor abundance, total factor productivity, factor bias, the relative cost of capital goods and the progressivity of the tax system are quantified using an elemental general equilibrium model with three households. For the US, changes in factor bias are shown to have been responsible to the great majority of the observed increase in inequality between 1990 and 2008. The widely anticipated further twist away from low-skill labour is then examined, with downward rigidity of low-skill wages and transfers that sustain low-skill welfare, the increments to which are financed either from capital income or consumption taxes. The potential is identified for unemployment, or “subsidised leisure”, to rise to extraordinarily high levels, with Pareto improving gains requiring that the technology twist accompanies substantial increases in total factor productivity.

Ismail Baydur; Singapore Management University, Fatih Yilmaz; Central Bank of Republic of Turkey

VAT Treatment Of The Financial Services: Implications for The Real Economy

This paper studies the effects of exempt treatment of financial services under a VAT system. We develop a general equilibrium model with elastic labor supply, endogenous entry, and a banking sector. The banking sector provides loan services to the producers and payment services to the consumers. Our model displays three key distortions under exempt treatment: (i) self-supply bias in the banking sector, (ii) under-taxation of payment services and consumption distortions, and (iii) input distortions in the business sector and tax cascading. We calibrate our model to match the salient features of the tax system EU countries. A tax neutral policy regime switch from exempt treatment to full-taxation in loan services improves welfare about 4%. Shutting down the entry margin has even bigger welfare gains. The same policy exercise for payment services also implies about 2% welfare gains and these gains are greater than zero rating of payment services.

Min Shi; Southwestern University of Finance and Economics, Shu Xu; Southwestern University of Finance and Economics (SWUFE), Shuoxun Zhang; Xiamen University

Export Decision, Tax Rebates And Wage: Evidence From Chinese Manufacturing Firms

Using Chinese National Bureau of Statistics (NBS) firm level data during 2000-2007, we investigate the effect of export tax rebates on the wage level of employees' and use labor intensity and bargain power to explore the channels through which export tax rebates work on employees' wage level. Our results show that workers in a firm enjoying high export tax rebates, as a whole, will be paid more comparing to the workers in other firms. Meanwhile, average wage is less elastic to export tax rebates in labor-intensive firms but is more elastic in firms with great employees' bargain power. Specifically, 1% increase in export tax rebates results in 0.255% increase of average wage in enterprises with median labor intensity and bargain power.

Session 3.6

Chair: Mehmet Bilgin

Takeshi Inoue; Kobe University

**Has Financial Inclusion Contributed to Poverty Reduction in India?
Empirical Analysis using State and Bank Group-wise Panel Data**

In India, the central bank formally announced that financial inclusion would be a primary policy objective in April 2005, although the concept of financial inclusion can be traced back to the start of social control of the banking sector in the 1960s. Since the late 1960s, the Indian government has successively implemented various initiatives to expand formal banking services to rural areas, where impoverished people are concentrated. In this study, we measure the degree of financial inclusion by the number of bank branches and alternatively, by the number of credit and deposit accounts. Using unbalanced panel data for Indian states and union territories from 1973 to 2004, we estimate models in which the poverty headcount ratio is explained by each indicator of financial inclusion and control variables applying the generalized method of moments estimation. The empirical results clearly indicate that financial inclusion has a statistically significant effect on alleviating poverty in both rural and urban areas, irrespective of which measure of financial inclusion is used. In addition, among the Indian commercial banks, promoting financial inclusion through the State Bank of India group has a larger poverty-reducing effect, followed by the nationalized bank group and the other bank group. In recent years, the asset quality of public sector banks, such as the State Bank of India and nationalized banks, has weakened and they have registered an increase in non-performing assets. The regulatory authority is required to solve the problems facing public sector banks, considering their role in financial inclusion.

**Rashid Memon; Lahore University of Management Sciences, Syed Hussain;
Lahore University of Management Sciences, Abid Burki; Lahore University
of Management Sciences**

**Does Repeated Borrowing Help Explain The Impact Of Micro-finance?
New Evidence From Pakistan**

Microfinance programs are targeting millions of poor households in developing countries by providing them access to micro credit. Easy access to micro credit allows poor households to reduce their capital constraints, manage risks, improve welfare by smoothing of income and consumption, asset accumulation and women empowerment, among others (Seng, 2017, Akotey and Adjasi,

2016). Despite the potential of microfinance to improve household welfare, several puzzles are yet to be resolved (Armendariz and Murdoch, 2010). More specifically, its impact on household welfare is far from clear since three groups of studies in the literature provide conflicting evidence. The first group advocates beneficial effects of microfinance on household welfare (Imai et al., 2010; Montgomery and Weiss, 2011; Deloach and Lamanna, 2011; Mazumdar and Lu, 2015). In the second group are studies, which fail to find beneficial effect on household welfare (Maldonado and Gonzalez-Vega, 2008; Anim et al., 2011; Banerjee, Karlan, Zinman, 2015). A third group displays mixed evidence of micro credit on households' welfare (Coleman, 2006; Ganle et al., 2015; Rooyen et al., 2012).

Yaswanth Nuthalapati; Indian Institute of Technology Kharagpur, Prithvi Hampapuram; Indian Institute of Technology Kharagpur

Impact Of Microfinance, Government Policies And Women Empowerment On Economy: Evidence From India

According to the World Bank statistics, the percentage of population living below poverty line in India reduced drastically from 37.2% in 2004 to 29.8% in 2009 and further to 21.9% in 2011. It is expected to be about 12.5% currently. One reason for this is the introduction of 1993 financial reforms. But the statistics show that the rate of people below poverty line coming over the poverty line in India has accelerated from 2006. It is due to government induced schemes, the most important of them being National Rural Employment Guarantee Act 2005. It came into action in 2006 which aims to guarantee the right to work. By providing at least 100 days of employment, it aims to enhance the livelihood in rural areas. It started with a mission to bring 10 million people out of poverty and in a way it succeeded. Micro Finance schemes by Government, banks and other financial institutions have also played a major role in bringing people out of poverty line. It is also observed in the families where women utilized above schemes, the percentage of families coming out of poverty line is high and repayment rate is also high. In this paper we explain the reasons behind this using Friedman- Savage utility function observe and why the National Rural Employment Guarantee Act and Microfinance have succeeded in improving the standard of living. we also discuss the impact of this scheme on the Indian Economy and role of microfinance in improving it. We also explain

the impact of changes done in the policy from the beginning on the economy and suggest the required policy changes.

Subash Sasidharan; IIT Madras, Chennai, India, Rajesh Raj S N; Sikkim University

Does Gender Of The Owner Matter For Firm's access To Formal Credit? Evidence From Small Firms In India

In this study we analyze whether gender of the owner matters in firm performance and in credit access from institutional sources. We employ unit-level dataset for the registered and unregistered enterprises, drawn from the Fourth Survey round on the Indian Micro, Small and Medium Enterprises carried out for the period, 2006-7. Unlike the existing studies, our dataset provide an opportunity to analyze gender gap in credit access using various measures of women involvement in the ownership and management of the enterprises. Our findings point to the underperformance in size, growth and efficiency of firms owned by women when compared to their male counterparts. Our empirical analysis suggests that irrespective of the extent of the women involvement in the firms, women-owned firms are more likely to be denied credit than male-owned firms. We find that male owned firms have about 15-20 per cent higher probability of obtaining a loan as compared to women entrepreneurs. Various robustness tests that we undertook support the existence of gender based discrimination in the credit market. The findings are thus consistent with the fact that women owned firms are disadvantaged against in the market for small-business credit, which would be traditionally attributed to discrimination, and any attempt at bridging the gender gap in performance should focus on addressing the gender discrimination in the small-business credit market.

Session 3.7

Chair: Yasuyuki Sawada

Mai Lien Dau; Assumption University, Yuthana Sethapramote; National Institute of Development Administration

Measuring Fiscal And Monetary Policies Spillovers In ASEAN

Deepening economic integration in ASEAN in the context of increasing globalization unquestionably brings to ASEAN member states enormously economic opportunities and benefits. It, however, brings member countries various corollary and risks, because deepening integration enhances the international and intra-regional spillovers into the member states, especially fiscal and monetary spillovers which becomes a more important sources of domestic economic fluctuations. Hence, it requires policymakers to have a better understanding of monetary and fiscal policy spillovers in a multinational system in order to monitor their macroeconomic fluctuations comprehensively. In literature, there is still few studies covered this topics for the case of ASEAN and most of these studies analyze the impacts of fiscal and monetary spillovers separately by using bilateral countries model. Hence, the objectives of this paper are to comprehensively examine fiscal and monetary policies spillovers from both inter-regional and intra-regional sources in the ASEAN-5 countries. Explicitly, we identify impacts of such shocks on the ASEAN-5 countries real GDP and inflation in a complex global system. In order to achieve these objectives, we apply a Global Vector AutoRegression (GVAR) model proposed by Pesaran et al. (2004). This approach allows us to model a multinational system in which all national and international factors in the system are interlinked. In the GVAR model, we include six variables, namely real GDP, inflation, real exchange rate, real interest rate, total government expenditure and oil price. The quarterly data of 20 countries (ASEAN-5, other Asia-Pacific and EU countries, and the US) over 2001 to 2015 are used. The empirical estimations show several important findings. Generally, the overall evidences show that both international and intra-regional fiscal and monetary spillovers are significant for all the cases of ASEAN-5 countries. Regarding to fiscal spillovers, external expansionary fiscal shocks generally cause significant increase in real GDP of ASEAN-5 countries. However, these impacts on ASEAN-5 countries' inflation are ambiguous. Additionally, our results show that fiscal spillovers from other East Asia countries (in particular, China) to ASEAN-5 countries are much stronger than these from the other Western advanced countries. This indicates that trade is an important channels in spillover transmission as trade between ASEAN countries and East Asia countries are more tightly integrated in comparing to its trade with the rest of the world. In contrast to fiscal spillover, the effects of monetary spillovers are inconclusive on both ASEAN countries' real GDP and inflation. Additionally, monetary spillover from the US and European countries are larger than these from East Asia countries. Regarding to policy spillovers within ASEAN countries, we find sufficient evidences of intra-regional fiscal and monetary spillovers in ASEAN countries, although intra-

regional monetary spillover seems to be stronger than intra-regional fiscal spillovers. At countries level, out of 5 ASEAN countries included in our study, Indonesia's variables of interest are less affected by external policy shocks. Last but not least, there are negative monetary spillovers from ASEAN member countries, China and advanced economies on ASEAN-5 real GDP. JEL Classification: C32, E52, E61, R62, F15

Akhand Akhtar Hossain; University of Newcastle, and Mala Raghavan

External Shocks, Inflation Volatility And Macroeconomic Fluctuations: Evidence From Indonesia And Thailand

The evidence presented in the extant inflation literature suggests that lower levels and greater stability of inflation together are essential conditions for steady economic growth. Policy-makers in developed and developing countries are perceived as willing to trade-off any short-run output losses if the gain from the trade-off is progress toward price stability. Rule-based monetary policy, such as inflation targeting, is increasingly regarded by the economics profession as the least inefficient monetary policy strategy for achieving the trade-off. Accordingly, the scope of monetary-policy study has expanded: (a) to include the sources of domestic inflation and its volatility, including external (foreign) sources; (b) to determine the extent to which inflation and its volatility constitute important components of macroeconomic fluctuations; and (c) to precisely define the role that monetary policy can play in sustaining price and output stability. Indonesia and Thailand are two major emerging open economies in Southeast Asia. They have exhibited considerable volatility since the early 2000s despite significant improvement in the quality of macroeconomic policy-making following the severe currency crisis of 1997-1998. Both economies are heavily vulnerable to domestic and foreign economic shocks that have substantial impacts on both the level and the volatility of the rate of inflation. For emerging market economies, such as Indonesia and Thailand, the channels through which inflation and inflation volatility affect macroeconomic performance can be costly. This paper postulates that, given the structural and/or policy-induced rigidities of the nominal interest and exchange rates, changes in inflation and its volatility affect the real interest rate and the real exchange rate. High volatility in these then affect saving, investment, trade and capital flows; in turn, compromising the volatility and volume of output-growth and employment.

Using a structural vector autoregressive (SVAR) modelling approach and monthly data for Indonesia and Thailand over the period 2000M1-2015M12, this paper undertakes an empirical study on the transmission of external economic shocks to both economies via their impacts on inflation and the volatility of inflation. To build the SVAR model, the paper makes use of small open-economy macroeconomic theory and of stylized facts. It imposes an appropriate identifying structure on the contemporaneous relation between inflation and inflation-volatility with key international and domestic macroeconomic variables. Following recent related studies, the paper highlights two categories of inflation and inflation-volatility drivers: (1) international shocks, caused by changes in global real output (activity), commodity prices and global liquidity; and (2) domestic economic shocks, caused by real output changes (industrial output changes, to be precise). These shocks are considered random; they affect inflation and its volatility both contemporaneously and dynamically. The "small open economy" assumption imposes the restriction of no feedback impact from domestic shocks to external variables, either contemporaneously or dynamically. External shocks have immediate impacts on domestic output and prices within a macroeconomic policy paradigm that is characterised by a flexible inflation targeting for price stability and a managed-float exchange-rate system with limited controls (explicit or implicit) over capital flows. The empirical results for Indonesia and Thailand suggest that an inflation shock that originates, for example, from external sources, has immediate and persistent adverse effects on domestic output while an inflation-volatility shock has immediate negative effect on asset prices with delayed negative effect on output. Moreover, within an inflation-targeting policy framework, contractionary monetary-policy responses of central banks to inflation shocks, which lead to an appreciation of the exchange rate, suggest persistent negative effects on output. These results are consistent with the view of an inverse relation between inflation and output, rather than the direct relation implied by the short-run Phillips curve. This validates the proposition, especially for developing countries, that price stability raises, rather than retards, the level and growth-rate of real output. Since, in these economies, real output is affected by both the level of inflation and its volatility, an active disinflation strategy of monetary policy may be a sensible choice. A policy implication is that both Indonesia and Thailand should continue with rule-based monetary policy strategy to maintain price stability, meaning low and stable inflation, along with output stability, as and when needed, to raise social welfare. An improvement of the conduct of monetary policy would also involve identification of the dominant shocks to which these economies are exposed, whether demand shocks, supply shocks or some combination of both. To

determine whether and to what extent each of Thailand and Indonesia follow some form of rule-based monetary policy, a specific interest-rate reaction function, in the form of a particular Taylor rule, has been estimated with data for each country since each introduced inflation targeting. The results suggest that neither Thailand nor Indonesia followed strictly the Taylor principle of using the real interest rate to stabilise inflation around a selected target rate. Consequently, inflation in these countries remained volatile, which affected output and kept it volatile. The paper concludes in favour of improving the conduct of monetary policy (i) with respect to an appropriate use of the policy instrument (i.e. the interest rate as chosen instrument); (ii) by raising the credibility of monetary policy under a more flexible exchange rate system; and (iii) by defining price stability, defined as a low and stable rate of inflation, as the primary target of monetary policy. If monetary policy aims to achieve only output stability, with price stability ignored, then the real interest rate is unlikely to be raised following a negative supply shock. Since such shocks are expected to raise inflation, the cost would be a greater-than-necessary loss of social welfare through higher-than-necessary volatility of both inflation and output growth.

Vimut Vanitcharearnthum; Chulalongkorn University

Business Cycle Accounting For Thailand

This paper applies the business cycle accounting methodology first proposed by Mulligan(2002) and Chari, et. al. (2007) to quantitatively analyze the sources of fluctuations during the recent recessions in Thailand, i.e., the 1997 Asian crisis and the 2008 great recession. The purpose of this application is to identify types of friction in a model economy that are essential in generating business cycle fluctuations similar to the actual data. Our estimate suggested that efficiency wedge and investment are quite volatile and persistent. Thus both wedges may at times exhibit extreme values that have long-lasting effect on output and other macroeconomic variables. In addition, at long horizons most of the forecast error variance of the real variables will be explained by these two shocks.

Monthien Satimanon; Thammasat University

The Asymmetric Effects of Oil Price Shocks on Thai Stock Market

There is a strong presumption that oil prices affect stock market returns. However, the empirical evidences on the impact of the oil price shocks on stock has been asymmetric and mixed. Most empirical papers use the change in the price of oil that is driven by either demand or supply shocks to explain such phenomenon. However, the roles of government intervention in the domestic oil market has rarely been incorporated. This paper evaluates the effects of oil price shocks on Thai stock market using Mixed Data Sampling (MIDAS) regression models. The models of aggregate and sectoral stock markets are estimated to study the effects of oil price shocks on Thai stock markets. MIDAS model has been adopted since it can involve different frequency in both dependent and independent variables; that is, independent variables (daily) can have higher frequency than dependent variable (monthly). Thus, MIDAS model is suitable for the case of Thailand given that the intervention on oil price has been implemented on a frequent but irregular basis. Estimated results show that the responses of Thai stock market return to oil price shocks differ greatly, depending not only bust or boom state of stock and whether the shock is driven by demand or supply but also the government intervention in the oil market. Without government intervention, an increase in oil price is conventionally associated with depressing stock market returns; however, with government intervention, the oil price shocks asymmetrically affect aggregate stock market returns.

Session 3.8

Chair: Teck Yong Tan

David Meenagh; Cardiff University

A Long-commodity-cycle Model Of The World Economy Over A Century And A Half - Making Bricks With Little Straw

In this paper we consider the world business cycle and specifically relate it to two main shocks: real commodity supply and prices, and money supply policy. Our model suggests that because there is a long gestation of commodity supply capacity commodity prices are capable of very large swings; these swings in turn cause swings in costs for non-commodity industries which act as a source of real business cycle shocks to output. Investment in the non-commodity sector is subject to quite short lags and so these shocks cause investment booms and busts in this sector which in turn generate booms and busts in general output. Our

model therefore refers back to the ideas of Kondratieff and Schumpeter concerning the importance of 'long waves' and commodities in the business cycle.

Eu Chye Tan; University of Malaya

Informal Sector And National Economic Resilience

The purpose of this study is to establish whether the informal sector could contribute to the resilience of a national economy. Cross-section and panel data techniques would be applied to the data of a group of countries to meet the objective. National economic resilience would be measured by the economic growth rates of countries and their stability. In the course of the analysis, attempts would be made to ascertain whether the possible link between the informal sector and economic resilience is identifiable with geographical region and stage of economic development.

M. Kabir Hassan; University of New Orleans

How big is FX liquidity premium?

This paper analyzes the liquidity premium in FX market based on 20 cross currency exchange rates between 2001 and 2016. Following Banti et al. (2012) and sorting the portfolios based on sensitivity of returns to systematic risk, first, we find that the size of the premium for the period of 2001-2016 is 3.36% which is slightly lower than Banti et al. (2012)'s finding of 4.7% calculated for the period of 1997 to 2008. This finding indicates that recent crises attribute to the presence of liquidity premium. Second, we provide a new sorting technique, where we sort the currencies based on the target interest rates provided by IMF. Using the return reversals as the proxy for liquidity measure, we find that the size of the liquidity premium is approximately 10% without control variables and 9% with control variables, which is higher than the previous findings in literature. The difference between developed and emerging currency-portfolios provides a substantial need for investors to require higher premium to compensate with higher risk. Our results remain robust in our more comprehensive dataset consisting of 34 currencies. Analysis of recent financial

crisis in 2008 indicates that investors require the higher premium size to compensate with greater liquidity risk.

Kiyotaka Sato; Yokohama National University, Huong Hoang; Foreign Trade University

Exchange Rate Pass-Through in Production Chains: Application of Input-Output Analysis

This study proposes a new empirical approach to the exchange rate pass-through (ERPT) in Japanese imports using an Input-Output (IO) analysis. We analyze how exchange rate changes are transmitted from import prices to domestic producer prices through numerous stages of production by employing the Japanese IO tables of 2000, 2005, and 2011. Specifically, calculating input coefficients among 108 industries at numerous production stages, we demonstrate that, contrary to the stylized fact, the extent of ERPT to domestic producer prices should be significantly higher than empirical results of the conventional ERPT analysis. Conducting a panel estimation of ERPT determinants, we show that a large dependence on intermediate input imports tends to increase the extent of ERPT. More importantly, we reveal that if manufacturing sectors tend not only to import intermediate inputs from abroad but also to export their products to foreign countries, the degree of import pass-through to producer prices increases significantly. Thus, growing international production sharing will have a positive impact on ERPT to domestic producer prices.

2.1 Public Policy and Welfare

Chair: Bryce Hool

Koichi Hamada; Yale University

Analytical Bases of Abenomics

*Views expressed below are strictly mine and not those of the Japanese Government

1. Original formulation of “Abenomics“, which started late in 2012, consisted of three arrows: bold monetary policy, flexible fiscal policy, and structural reforms for further growth.
 - (1) Monetary Easing had a substantial success: the labor market showed remarkable success in terms of the job offer-applicant ratio (1.49) and unemployment rate (2.8%),
 - (2) Fiscal stimulus was at least interrupted by the hike of consumption tax, but the growth was promoted by careful government expenditures. Moreover, government revenues recovered substantially.
 - (3) Structural reforms are difficult in any country. The team of PM Abe and Cabinet Secretary keeps the momentum of reforms and market liberalization.
 - (4) In my opinion, however, inflation target is only meaningful as an intermediate target to prevent unemployment, as a welfare measure of a nation. . If that is right, Japan’s Abenomics is considered a great success. In fact, I consider that this is the main reason why PM Abe keeps his political stability.

II. Why did monetary stimulus work so well?

- (1) There was a long period of yen appreciation after the Lehman Crisis. New BOJ Governor, Haruhiko Kuroda, shifted the policy stance from an austere to expansionary monetary policy.
- (2) Even under the zero interest bound (ZIB), quantitative effects such as real balanced effects and yen depreciation effects did work.
- (3) Under the flexible exchange rate regime, the currency war does not exist because each country can undo the undesirable effect of monetary expansions of foreign countries.
- (4) Under flexible exchange rates and absence of the ZIB, laissez faire monetary policy attains the Pareto efficient macroeconomic outcome for the world economy (Hamada-Okada, JJIE 1997).

III. What are the prospects for the Japanese economy?

- (1) Around 2015, because of the Dodd Frank legislation, and China's intervention, the foreign currency market has shown some anomalies including the breakdown of the covered interest parity. Accordingly, Abenomics' first arrow ceased to work properly.
- (2) The triumph of the Trump administration came from dissatisfaction that freer trade and globalization will not generally promote the welfare of workers under competitions from emigrants, from imported goods, and Artificial Intelligence (AI). This is the economic basis of Trump's victory. Incidentally, this is the reason why Japanese citizens are not completely happy with the Abe administration.
- (3) The emergence of un-orthodox Trump administration was welcomed by the stock market in Japan as well as in other regions, though the exact reasons are unknown. It seemed that the Trump administration have worked against the appreciation of the yen.
- (4) It is interesting to observe, however, that these effects are mitigated whenever the political maneuverability of the Trump Administration is cast in doubt.

Bio:

Koichi Hamada is Tuntex Professor Emeritus of Economics at Yale University, where he specialized in the Japanese economy and international economics, and Professor Emeritus at the University of Tokyo, where he taught before coming to Yale in 1986. Professor Hamada has an L.L.B. (he passed Japan's national Bar Examination in 1957), and an M.A. in Economics from the University of Tokyo as well as an M.A. and Ph. D. in Economics from Yale University. His work on policy coordination, one of which first applied game theory to international finance, was published as **The Political Economy of International Monetary Interdependence** (MIT Press, 1985), and some of his economic articles are collected in **Strategic Approaches to the International Economy: Selected Essays of Koichi Hamada** (Edward & Elgar, 1996). He is a fellow of the Econometric Society and served as its council member from 1980 to 1985. Hamada was the President of the Japanese Association of Economics and Econometrics (now the Japan Economic Association) from 1994 to 1995 and was the founding President of the Japan Law and Economics Association in 2003 (now its honorary fellow). He was awarded the imperial decoration, the Order of the Sacred Treasure, Gold and Silver Star, which is given to those who have accumulated distinguished achievements for Japan, 2006.

In Japan, he participated in many policy committees at the Ministry of Finance, MITI, the Economic Planning Agency and other ministries. Hamada also serves as one of the associate editors for many journals including *Econometrica*, *Journal of International Economics*, *Journal of Economic Theory*, *Journal of Public Economics*, *Journal of Development Economics* and *Journal of the Japanese and International Economies*.

Ali Khan; John Hopkins University

Welfare Economics and Cost-benefit Analysis in the Small using the Money Metric

The well-known fact that money-metric utility functions cannot be concave in consumption has led some scholars to argue against its use in applied welfare analysis. We prove two welfare results: that any competitive equilibrium

allocation maximizes the sum of money-metric utilities at the competitive equilibrium price; and that the derivative of the sum of money-metric utilities equals seven other local measures of welfare in a general equilibrium setting, including one proposed by Radner (1982). The tool we use to prove these results is this: any solution to the consumer's problem for the general non-concave money metric representation must satisfy the famous saddlepoint inequalities from concave programming even if preferences are not convex. This fact allows us to calculate consumer demands as the solution to an unconstrained optimization problem. We thereby furnish a saddlepoint rehabilitation of the money-metric in its application to applied welfare economics. JEL: D110, C61, D610.

Bio:

M. Ali Khan graduated with First Class Honours from the London School of Economics (LSE) in 1969 with specialization in Economics and Econometrics. He obtained an M. Phil. in 1972, and a Ph. D. in 1973 from Yale University with a dissertation titled Large Exchange Economies. On graduation, he was appointed as Assistant Professor at the Johns Hopkins University, and in 1989, as the Abram Hutzler Professor of Political Economy, a position he has held since. He was Professor at the University of Illinois at Urbana-Champaign (1984-1988) and the Visiting Goh Kang Swee Professor at the National University of Singapore (NUS) (Fall 2008). In addition, he has held visiting appointments at the LSE, Northwestern University, Cornell University, Pakistan Institute of Development Economics, Applied Economics Research Centre (Karachi), Bilkent University (Turkey), Funda_cao Getilio Vargas (Brazil), CORE (Belgium), The Australian National University, University of Melbourne, Maison de Economique (Paris), Institute of Mathematical Sciences at NUS, University of Queensland and the Indian Statistical Institute (Delhi). Ali Khan works on how economics interfaces with both the human and the mathematical sciences. His current research interests concern games and economies with a continuum of agents, economic dynamics, the interface between mathematical statistics and mathematical economics, history of economic thought, ethics and epistemology, and particularly the interface of the vernacular of commerce in Islamic studies and in modern discourses of economics and finance.

2.2 Microeconomics

Chair: Julian Wright

William S. Neilson; University of Tennessee

Equilibrium Vaccination Patterns in Asymmetric Networks

Most studies of vaccination programs focus on the problem of too few vaccinations. This paper shows that when individuals interact in a contagion network, under-vaccination is only one of the possible inefficient outcomes. When the network has asymmetries, either from the network structure or from underlying individual differences, there can exist Nash equilibria in which the right number but wrong set of people get vaccinated, and equilibria in which too many get vaccinated. Both targeted subsidies and targeted penalties can correct the inefficient equilibrium vaccination allocations, but we provide reasons why targeted penalties might be preferred. Untargeted, universal subsidies and mandates can perform worse than the inefficient equilibria they were designed to correct.

Bio:

William Neilson is a professor of economics at the University of Tennessee, Knoxville, where he holds the J. Fred Holly Chair of Excellence. He also serves as department head. Before moving to Tennessee he spent 18 years on the faculty at Texas A&M University. He was editor-in-chief of *Economic Inquiry* from 1997 to 2001, and editor-in-chief of the *Journal of Economic Behavior & Organization* from 2011 to 2016. Between the two journals he had responsibility for more than 7000 new submissions. He is an economic theorist with primary interests in decision theory, behavioral economics, and game theory. He has published more than 50 articles in academic journals, including *Econometrica*, *Journal of Economic Theory*, *Games and Economic Behavior*, *Journal of Risk and Uncertainty*, and *Management Science*.

Yuk-fai Fong; Hong Kong University of Science and Technology

Agent Information Acquisition And Utilization In Relational Contracts

This paper studies a repeated principal-agent relationship in which the agent both collects information and makes investment decision on behalf of the principal, utilizing both his private information and the informative public opinion. The optimal relational contract may induce the expert to be somewhat resistant to the public opinion, which we interpret as a form of stubbornness. For intermediate discount factors, it is optimal for the principal to induce such stubborn behavior in the agent when the publicly opinion is neither too precise nor too imprecise. On the other hand, in contrast to findings in the related literature, it is never optimal to induce conservative utilization of the expert's private signal.

Bio:

Yuk-fai Fong is Professor of Economics and Director of Center for Experimental Business Research at Hong Kong University of Science and Technology. His research interests are Industrial Organization and Applications of Repeated Games. Professor Fong has published his work in leading journals such as *Journal of Political Economy*, *Review of Economic Studies*, *International Economic Review*, *RAND Journal of Economics*, *Journal of Economic Theory*, and *Games and Economic Behavior*. Professor Fong is an Editor of *B.E. Journal of Theoretical Economics* and Associate Editor of *International Journal of Industrial Organization*. Before joining HKUST in 2011, Professor Fong as Assistant Professor of Management and Strategy at Kellogg School of Management from 2003 to 2011.

Special Session 2.3 Economic History

Chair: Chia Siow Yue

Malcolm Rutherford; University of Victoria

Market Deficiencies: From Veblen to Akerlof and Shiller

In the past the standard discussions of market failures in economics textbooks confined themselves to issues involving externalities, public goods, and common property (open access). Subsequent to George Akerlof's famous paper "The Market for 'Lemons'" (Akerlof 1970), discussions of the problems created by asymmetric information gradually became standard fare, but the issues raised by thinking of asymmetric information in economic matters extends far beyond the used car and health insurance markets that are normally used as the paradigm cases. In fact, consideration of the problems of information will inevitably lead to an examination of the problems of market manipulation and fraud, especially in light of the 2008 financial crisis. Akerlof has himself travelled this path as indicated by his recent book with Robert Shiller *Phishing for Phools* (2015).

Akerlof and Shiller provide a litany of examples of manipulation and deception in advertising and in many markets including financial markets. They also have a chapter on "The Resistance and its Heroes" that highlights some of the people and agencies that have worked to expose and reduce phishing, but this chapter is remarkably sparse. What this paper attempts to do is to fill out some of this history by focusing on the work of American institutional economists from Veblen to Galbraith, who critically examined the issues of manipulation and deception in advertising, salesmanship, and finance. Some general considerations relating to the problem of fraud are also discussed.

Bio:

Malcolm Rutherford is emeritus professor of economics at the University of Victoria, BC, Canada. He has published widely on the history of American institutional economics in *History of Political Economy*, *Journal of the History of Economic Thought*, *European Journal of History of Economic Thought*, *Journal of Economic Issues*, and the *Journal of Economic Perspectives*. He is the author of *Institutions in Economics: The Old and the New Institutionalism*

(Cambridge UP, 1994) and *The Institutionalist Movement in American Economics, 1918-1947: Science and Social Control* (Cambridge UP, 2011). The latter was given the European Society for the History of Economic Thought best book award in 2013. He has been President of both the Association of Evolutionary Economics and the History of Economics Society. He was given the Veblen-Commons Award by the Association of Evolutionary Economics in 2013, and made a Distinguished Fellow of the History of Economics Society in 2014.

Masami KITA; Soka University

British (Scottish) Influence Of Technology And Business To China And Japan After India In 19th Century

It is known that there were two stages of Western approach to Asia in 16th century of Great Navigation Era and in the late 19th century of formation of steamers networks to Asia in 19th century. There were different ways of response to them among China, Korea and Japan while they faced Western powers. I wonder why and how Japanese could cope to industrialize and modernize the nation in this serious international environment and secondly, why were not happened with Korea and China at that time. Among Westerners to Asia, there were characteristic of dynamic movement of British (Scottish) diplomat, missionary, engineer and teacher to Asia. Behind Scottish Diaspora to Asia and the World, Scotland was traditionally poor and was obliged to accept the Union in 1707 when Scottish parliament was abolished. But there were four universities of St. Andrews, Glasgow, Aberdeen and Edinburgh in the medieval period when only two universities of Oxford and Cambridge in England. The characteristic of Scottish university education was practical work to get jobs. This education became fruitful when the time of the Industrial revolution. In the middle of 19th century, Glasgow was called the Capital of railway, shipbuilding and mechanic industries and the first Chamber of Commerce and Industry was established in Glasgow. Then, I would like to focus on different response among China, Korea and Japan and British (Scottish) Influence to Asia.

Special Session 2.4 Employment and Social Security

Chair: James Ang

Partha Sen; Delhi School of Economics

Social Security and Delayed Retirement: A Two-Sector Model

The falling fertility and mortality rates in the OECD countries pose a major challenge to the PAYG social security systems. In this paper we have analyzed in a two-good framework, the general equilibrium implications of a postponement of retirement. If the postponement is small, then capital accumulation occurs—but it is not clear how much help does this lend to the potential “insolvency” of the PAYG system.

If, per contra, the retirement wage income is allowed to be large, the social security system becomes “solvent” but capital accumulation and growth will suffer, as agents now save less for old age. There are then no free lunches.

Bio:

Partha Sen obtained his PhD at the London School of Economics. He was a Professor at the Delhi School of Economics from 1996 to 2011 (when he took early retirement) and Reader in Economics from 1990-1996. He has also held full-time appointments at the University of Illinois, Urbana-Champaign, the London School of Economics and the University of Bristol; and visiting appointments, among others, at University of Michigan, HKUST, NUS, NTU and City University, Hong Kong. His papers have been published in journals like the *International Economic Review*, *Journal of Public Economics*, *Journal of International Economics*, *Journal of Economic Dynamics and Control*. He was the Editor of the *Indian Economic Review* from 1997 to 2007.

His areas of interest are macroeconomics, international economics and environmental economics. He is a member of the CESifo Munich's research network.

John Strauss; University of Southern California

Gender and Socio-economic Gradients of Cognition Measures: New Evidence from Indonesia

In this paper, we use a measure of fluid intelligence, an adaptive number series test, to measure that part of cognition for respondents in a low income, low

educated population. This test was specially adapted by us and our collaborators from measures used in the United States to better fit such populations. We use another measure of fluid intelligence, plus a measure of episodic memory and one measuring mental state intactness and examine their distributions and then the socio-economic gradients associated with each, concentrating on gender differences and how those change as SES and variables measuring community development are added.

We explore the socio-economic gradients for these measures, separately for different age groups: 15-44, 45-59 and 60 and above. We find a significant, negative differential for women that are substantially less for the younger age group, 15-44, for whom the schooling differentials are smaller. The gender differential declines substantially or disappears entirely once we control for SES characteristics. Adding community measures related to mean schooling and asset levels does not affect the gender differential.

Schooling levels are monotonically and significantly related to higher levels of cognition for all four of the variables we use. The magnitudes of the schooling coefficients are relatively large. Higher household assets, particularly at higher levels is also positively associated with cognition. Other SES characteristics such as height, are also positively related to the cognition measures. Mean community level schooling and assets are also positively related to cognition outcomes, especially for the elderly, and often more so for older women.

Bio:

John Strauss is Professor in the Economics Department and in the Davis School of Gerontology at the University of Southern California. He was Editor-in-Chief of the scientific journal, *Economic Development and Cultural Change* from August 2003 until November 2013. He was co-editor of the *Handbook of Development Economics, Volume 4*, which contains major surveys of the recent scientific literature on various topics in development economics, including a co-authored a chapter by Strauss on health and development economics.

Strauss is the Principal Investigator of Indonesia Family Life Survey (IFLS), with co-PIs Bondan Sikoki of Survey Meter, and Firman Witoelar. IFLS is a major panel survey of households and communities in Indonesia, funded by NIA and NICHD. Strauss is also a Principal Investigator of the China Health and Retirement Study (CHARLS), along with Professor Yaohui Zhao of Peking University and Dr. Gonghuan Yang of the Chinese Academy of Medical Sciences and Peking Union Medical College. CHARLS is funded by NIA. His

previous positions include in the Economics departments at Michigan State University, Yale and the University of Virginia. He is also affiliated with the RAND Corporation and is a Chang Jiang Scholar at Peking University.

Chair: Leslie Teo

Ahmet Faruk Aysan; Istanbul Sehir University

Fortuning the small and the plenty: Islamic banking for small and medium-sized enterprises

While MSMEs form the backbone of many countries, most of them suffer from limited access to external finance. We provide an additional dimension to the literature by examining whether Islamic banks, compared to their conventional peers, fortune more the Turkish MSME segment of the credit market. We do this by considering various aspects of MSME lending behavior (lending, foreign exchange lending, loan commitments, loan quality, revenues, and cyclicity) across different MSME size categories (micro, small and medium-sized firms). Our findings in general, and throughout different size categories, confirm that Islamic banks vis-a-vis MSMEs are more engaged with foreign exchange lending, total lending, and issuance of letters of credit. We also find that Islamic banks generate more revenues from their MSME lending portfolio. The quality of their MSME loan portfolio is, however, not unequivocally different. Our findings further show that MSME lending by Islamic banks tend to be on average less cyclical. Keywords: Small business lending, Islamic banking. JEL: G21, G28, G3

Bio: **Ahmet Faruk Aysan** received his B.A. in economics from the Bogaziçi University in 1999 and both his M.A. (2001) and his Ph.D. (2005) in economics from the University of Maryland College Park. He became an Associate Professor in 2008. Dr. Aysan, who served as a consultant at various institutions such as the World Bank, the Central Bank of the Republic of Turkey and Oxford Analytica, has been lecturing at the Department of Economics at Bogaziçi University since 2005. Before joining the Istanbul Sehir University as a professor, Dr. Aysan has been the Board Member and Monetary Policy Committee Member of the Central bank of Republic of Turkey. He has also served as the Deputy Director of the Center for Economics and Econometrics at Bogaziçi University, a member of the G-20 Financial Safety Net Experts Group, a member of the Advisory Board of Social Sciences and Humanities Research Group of TÜBİTAK, and a National Expert in ‘Socio-Economic Sciences and Humanities’ under the Seventh Framework Programme of the European Union. Dr. Aysan’s fields of specialization are international finance, macroeconomics, political economy, banking and finance, econometrics,

governance and development and he is a member of editorial and advisory boards of several international journals.

Dr. Aysan, who has many articles published in academic journals, was awarded with the Bogaziçi University Foundation Publication Awards; Bogaziçi University Foundation Academic Promotion Awards and the Ibn Khaldun Prize for the best paper on the North African and Middle Eastern Country Studies granted by Middle East Economic Association. Dr. Aysan has also served at the advisory board of the Contemporary Turkish Studies at London School of Economics and Political Sciences (LSE) European Institute.

Kwanho Shin; Korea University

A Contagion through Exposures to Foreign Banks during the Global Financial Crisis

Although the global financial crisis of 2008 took root in the advanced countries, its shocks spread through the emerging economies reflecting the increasingly interconnected global financial system. In this paper, we develop an empirical methodology to test the contagion effect at the country level using bilateral data on bank claims between countries. Our goal is to empirically measure direct and indirect exposures of emerging economies to crisis countries, and test whether these exposures matter for capital outflows from emerging economies. We computed measures of a country's direct and indirect exposures to the crisis-affected countries by using bilateral foreign claims sourced from the Bank for International Settlements' (BIS) (i) consolidated banking statistics foreign claims on immediate counterparty and ultimate risk bases and (ii) locational banking statistics cross-border total claims. Our findings show that emerging market economies that were more exposed, both directly and/or indirectly, to banks in the crisis-affected countries suffered from more capital outflows during the global financial crisis.

Bio:

Kwanho Shin is Professor of Economics at Korea University. He received his B.A. and M.A. in economics from Seoul National University and Ph.D. in economics from UCLA. He was Assistant Professor at the University of Kansas for four years and occasionally taught at UCLA, Claremont Graduate University and Claremont McKenna College as a visiting professor. He was elected as "One

of the Fifty Future Leaders in Korea” by the Seoul Economic Daily in 2010 and a MaeKyung Economist by the Maeil Business Newspaper in 2011. He also served as a council member for the National Economic Advisory Council from 2010 to 2011. He has published widely on the subjects of business cycles, monetary economics, international finance and labor economics in a number of leading academic journals including American Economic Review, Journal of Monetary Economics, Journal of Econometrics, Journal of Money, Credit and Banking, Journal of International Economics, Journal of International Money and Finance and Journal of Labor Economics.

Special Session 2.6 Finance

Chair: Shigeyuki Hamori

Ramo Gençay; Simon Fraser University

Economic Links and Return Volatility

This paper investigates the propagation of stock return volatility along supply chains. Our results show that when customer volatility increases by 1%, a supplier's volatility increases by approximately 0.03% to 0.05% in the following month. Our findings are robust to controlling for variables capturing the time-series properties of volatility and a set of idiosyncratic, industry and market factors; tested under various assumptions regarding the activeness of customer-supplier linkages; and to different estimation methods. Our out-of-sample tests provide consistent evidence that incorporating the customer channel improves volatility forecasting.

Furthermore, we show that the transfer of volatility is more pronounced when investors are more aware of customer-supplier linkages.

Bio:

Dr. Gençay's broad specializations are financial econometrics, financial economics, market microstructure and trading, nonlinear time series, nonparametric econometrics and chaotic dynamics. He has over 65 scientific publications which have appeared in finance, economics, engineering, statistics and physics journals. His refereed papers have been cited over 1,700 times in Web of Science indexed journals with an h-index of 24. His Google Scholar citations is 7,119 with an h-index of 36. Some of his publications are published in the Journal of the American Statistical Association, Journal of Econometrics, Econometric Theory, Journal of International Economics, International Economic Review, Journal of Nonparametric Statistics, Journal of Banking and Finance, Quantitative Finance, European Journal of Finance, Journal of Empirical Finance, Journal of Economic Dynamics and Control, Journal of Applied Econometrics, European Economic Review, Journal of Forecasting, IEEE Transactions on Neural Networks, Physica A, Physica D and Physics Letters A. He is a senior fellow at the Rimini Center for Economic Analysis (RCEA), Rimini, Italy, and a fellow of the Info-Metrics Institute at American University, Washington DC, USA.

He is a co-author of two books, [*An Introduction to High-Frequency Finance*](#) and [*Wavelets and Other Filtering Methods in Finance and Economics*](#) published by Academic Press, and the founding editor of [*Finance Research Letters*](#). His book on *High-Frequency Finance* provides a framework to the analysis, modeling, and inference of high-frequency financial time series. It begins with the elementary foundations and definitions needed for studying the fundamental properties of high-frequency financial time series. It extends into the adaptive data-cleaning issues, treatment of seasonal volatility, and modeling of intraday volatility. Fractal properties of the high-frequency financial time series are found and explored, and intrinsic time is used to construct forecasting models. This book provides a detailed study of how the adopted framework can be effectively utilized to build econometric models of the price-formation process. Going beyond the price-formation process, this book presents the techniques to construct real-time trading models for financial assets. [*The Chinese edition of An Introduction to High-Frequency Finance*](#) will be published in 2018.

Naoyuki Yoshino; Dean, ADBI, Tamon Asonuma; International Monetary Fund

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

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.

Bio:

Naoyuki Yoshino is Dean of the Asian Development Bank Institute (ADBI) and Professor Emeritus at Keio University, Tokyo, Japan. He obtained his PhD from Johns Hopkins University (United States) in 1979 where his thesis supervisor was Sir Alan Walters, economic adviser to former British Prime Minister Margaret Thatcher. Naoyuki has been a visiting scholar at the Massachusetts Institute of Technology (United States) and a visiting professor at various universities including the University of New South Wales (Australia), Fondation Nationale des Sciences Politiques (France), and University of Gothenburg (Sweden). He has also been an assistant professor at the State University of New York at Buffalo and an economics professor at Keio University. Naoyuki's professional career includes membership in numerous government committees. He was named Director of the Japan Financial Services Agency's (FSA) Financial Research Center (FSA Institute) in 2004 and is now Chief Advisor. He was appointed as Chair of the Financial Planning Standards Board in 2007. He has served as Chairperson of the Japanese Ministry of Finance's Council on Foreign Exchange as well as its Fiscal System Council (Fiscal Investment and Loan Program Section). Additionally, he has been a Board Member of the Deposit Insurance Corporation of Japan and President of the Financial System Council of the Government of Japan. He was nominated for inclusion in Who's Who in the World for 2009 and 2013, and was named one of the Top 100 Educators in 2009. He obtained honorary doctorates from the University of Gothenburg (Sweden) in 2004 and Martin Luther University of Halle-Wittenberg (Germany) in 2013. He also received the Fukuzawa Award in 2013 for his contribution to research on economic policy.

Session 4.1

Chair: Xiaoping Chen

Chin-Ho Lin; Keio University

Does Asian fragmentation matter for the extensive margin of international trade in machinery production networks?

This paper explores the depth and extent of participation in international machinery production networks to quantify the extent of global production sharing by using highly disaggregated international trade data at the Harmonized System six-digit product level. We examine and quantify the changes in the number of product–country pairs exported from international trading partners to ASEAN+3 countries during 1996–2013. Specifically, we estimate the probability of exporting in terms of goods being traded with ASEAN+3 countries in 2013, and analyze whether distinct product categories cause significant differences in performance in the extensive margins of production networks (namely those involving parts and components and final products). Our probit estimate with marginal effects predicts a 14.3% higher probability of exporting parts and components than exporting final products in 2013. Moreover, we further decompose the characteristics of product–country pairs and find that parts and components have a 12.8% higher probability of becoming new product–country pairs and a 14.5% lower probability of becoming disappearing product–country pairs, compared with final products. These marginal effects are robust even if individual ASEAN+3 countries are considered.

Han Lim; Bank Negara Malaysia, Boon Hwa Tng; Bank Negara Malaysia

Global Value Chains and the Exchange Rate Elasticity of Exports

Theoretical (Auboin and Ruta, 2013) and empirical evidence (IMF, 2015) show that exchange rate movements influence trade. In recent years, however, episodes of large depreciation of Malaysia's exchange rate seem to have had a minimal impact on its exports (Bank Negara Malaysia, 2016). Although the Malaysian Ringgit depreciated by 18.6% and 4.3% in 2015 and 2016, respectively, the corresponding performance of exports growth was minimal

(1.6% and 1.1%). The responsiveness of imports was also muted. This seems broadly consistent with recent cross-country studies (Ahmed et al, 2015 and Ollivaud et al, 2015), which have attributed the weaker relationship between exchange rate and exports to increasing participation of firms in Global Value Chains (GVCs). In particular, an increase in backward linkages is associated with a lower exchange rate elasticity (Koopman et al, 2010) because GVC-related imports are complimentary to their relevant exports counterpart. Moreover, the complexity of trade in intermediate goods - mirroring the fragmentation of production in global trade, necessitates a re-examination of elasticity of trade between GVC- and non-GVC-related goods (Kevin et al, 2016). In this study, we estimated the impact of exchange rate on exports, paying particular attention to the role of GVCs in affecting the exchange rate elasticity. In Malaysia's case, the impact of GVC participation on the exchange rate elasticity of exports is critical from both a cyclical and structural standpoint. The high import content of Malaysia exports, at 45%, is among the highest globally (OECD, 2011) and reflects Malaysia's deep trade linkages in the GVC. An understanding of the exchange rate elasticity, once GVC participation is accounted for, is thus crucial in assessing its own role relative to price competitiveness and external demand in driving exports. While exchange rate fluctuations can have both direct and indirect effects on trade, whereby the latter refers to the price-setting behaviour of firms and the pass-through of the exchange rate to export prices, this study focuses on the direct impact of Malaysia's participation in GVCs on its exchange rate elasticity of export volumes. The key contribution of this study is its relevance to recent theoretical developments and empirical studies on the role of GVCs in shaping global trade. We use a quarterly dataset from 2000 to 2016 to estimate an error correction model. Data on Malaysia's GVC participation is measured by its import content of exports, obtained from the 2015 OECD-TiVA database.

Jingyun Gao; Southeast University, Shumei Chen; Southeast University

China's Belt And Road Initiative And The Asia-pacific Economic Integration: From The Perspective Of Transportation Infrastructure Connectivity

Based on the statistical analysis of Asia-Pacific trade pattern in 2007-2015 with complex network centrality theory to explore the new direction of Asia-Pacific

development under BRI, this paper utilizes the Global Trade Analysis Project (GTAP) model to simulate and compare the potential impacts of transportation infrastructure connectivity between China's Belt and Road Initiative (BRI) and China-ASEAN Free Trade Area (CAFTA), Regional Comprehensive Economic Partnership (RCEP) and Free Trade Area of the Asia-Pacific (FTAAP) existing in Asia-Pacific regional cooperation mechanism, from different perspectives such as economic aggregate, foreign trade, welfare and sectoral output. The results indicate that there is an imbalanced pattern in the Asia-Pacific trade network and some countries and regions such as China, US and Japan, have played the bridge role, while some others on the periphery. When China's BRI and Asia-Pacific free trade agreements realize transportation infrastructure connectivity, all members are expected to benefit most from economic aggregate and foreign trade, while non-members will suffer some losses. As trade agreements expand, the benefits of the overlapping members will be slightly reduced. In terms of welfare, all countries and regions in the world, both members and non-members will gain benefits, yet at different degrees. For sectoral output, positive effects on agriculture, processed food, textile and garment, mineral resources and wood processing in most countries and regions can be achieved. Finally, based on the above analyses, policy implications for promoting Asia-Pacific economic integration are put forward.

Dapeng Cai; Nanzan University, Yukio Karasawa-Ohtashiro; Nanzan University

Greenfield, Merger And Acquisition, Or Export? Regulating The Entry Of Multinational Enterprises To A Host-country Market

How should a welfare-maximizing host government regulate the entry of multinational enterprises (MNEs) where they compete with local firms for the host-country market? We demonstrate that the optimal entry regulation depends on the size of the host market: The host government chooses to grant cross-border mergers and acquisitions (M&As) when the host market is sufficiently small; otherwise, it chooses direct export. Greenfield investment, on the other hand, will not be granted. Moreover, we show that for the case of M&A, the MNEs would acquire the most efficient local firm.

Session 4.2

Chair: Kim-Heng Tan

Che Cheong Poon; Hong Kong Shue Yan University

The Applicability Of Fisher Equation Of Interest Rates To Explain The Relationship Between Nominal Interest Rate And Expected Inflation Rate In Hong Kong

Since Irving Fisher's initiative to model the impact of expected inflation on nominal interest rates in 1930, there has been a relatively large literature examining the empirical applicability of this model. Unfortunately, these research results varied significantly across countries and over time. This paper aims to justify whether the Fisher equation of interest rates can be applied in Hong Kong to explain the impact of inflationary expectation on interest rates. To do this, the author collected the time series of Hong Kong Dollar Interest Settlement Rate and Composite Consumer Price Index released respectively by the HKMA and HKC&S Department from July 1996 to May 2017. After a comprehensive review of related literature, the author first used an appropriate ARIMA model to estimate a time series of the year-on-year expected inflation rates. By adopting centered moving average, simple linear regression and hypothesis testing statistical techniques, research results show that the null hypotheses of the existence of Fisher Effect and the constancy of real interest rates cannot be rejected. In particular, the time lag of the impact of a change in expected inflation rate on nominal interest rate during the acceleration phase of inflation is longer than that during the deceleration phase of inflation, and the higher is the expected inflation rate, the smaller is the slope of Fisher equation. The study will fill the literature gap of applying Fisher equation of interest rates to explain the impact of inflationary expectation on interest rates in a small open economy adopting a currency board system.

Keywords: Fisher effect, expected inflation rates, constancy of real interest rates, autoregressive models, moving correlation coefficient JEL codes: C12, C13, C22, E31, E43

Kian Teng Kwek; University of Malaya

If Negative Real Rates Are Natural, are Negative Nominal Rates Unnatural?

Since the Global Financial Crisis of 2008, nominal interest rates (i) have been low across major advanced economies (AE). When the central banks of AE started to adopt the Zero Interest Rate Policy (ZIRP), the decline in negative real rates (r) on deposits has become persistent and was accepted as the norm or natural policy for unconventional monetary policy. However, ZIRP creates collective action trap (as in taper tantrum of 2013) because no country can increase interest rates, tax rates and regulation without huge capital flows and arbitrage. However, when the negative nominal interest rates first set in June 2014 in the Euro Area, this phenomenon has become a key debate amongst economists. Currently, four major economies with negative nominal rates policy (NIRP) are Japan (-0.10%), Switzerland (-0.75%), Sweden (-0.50%), and Denmark (-0.65%). Will this negative nominal rates now be the new norm and for how long? How will the emerging economies be impacted through the NIRP? This study attempts to measure the distortion of real rates vs nominal rates in advanced economies vs emerging economies. Low interest rates policy have mainly redistributed resources from net savers to net borrowers. As the latter typically have a higher marginal propensity to consume than the former, this would further support excessive consumption by leverage and fueled through creation of financial engineering machine. The Fisher Effect developed by the early American economist Irving Fisher (1867-1947) is applied to measure the relative distortion of real rates vs nominal rates. The original Fisherian theory of interest suggests that the real rate of interest (r) reflects real and not monetary factors (i). Studies like Hirshleifer (1970) stated that the real rate of interest should not, at least as a first approximation, be affected by monetary factors like a mere change in the price level (or inflation π). This study would relook at this old theory and would suggest that over a long term period, changes in monetary control measures, such as adjustments in interest rates or the money supply, have real effect on real interest rates or economic output. This implies that negative nominal rates are not unnatural in the unconventional monetary policy context. The results of Fisher Effect using the Autoregressive Distributed Lag (ARDL) model suggest that economies will balance/adjust market distortions through nominal interest rate and inflation rate. That is to say that the real rate of interest reflects both the real and monetary factors. Fitting an error correction term to the ARDL model would also show the net savers effect vs the net borrowers effect.

Marc Nückles

Structural Reforms, Financial Acceleration, And Unconventional Monetary Policy

I study how structural reforms in the periphery of the European Monetary Union affect economic activity during a financial crisis. The main contribution of the paper is that it considers three key characteristics of the recent financial crisis that are potentially relevant for policy analysis: First, the crisis was triggered in the financial sector; second, there were spillovers from the financial to the real sector due to credit rationing; third, governments actively intervened in the credit market during the crisis. I construct a dynamic general equilibrium model with financial frictions to address these issues. The model allows insights into how asset prices, credit spreads, and credit intermediation respond to reforms. I show that permanent structural reforms have positive effects on aggregate output in both the long and the short run. They affect the capital market positively and stimulate credit intermediation. Moreover, structural reforms are not in conflict with credit market interventions.

Quan Yang; Xiamen University

Swap Agreement And Liquidity Shock -- test The Magnitude Of Swap Agreement For the "One Belt And One Road" Countries

This paper builds a model of liquidity shock due to the inverse flows of international capital and how to rescue it at open economic circumstances. Using the expected surplus equation to calculate the optimal magnitude of swap agreement, and compare the expected surplus with different rescue ways. Analyzes the welfare effect and the optimal interval of swap agreement for different liquidity shocks by parameter setting and simulation. The results tell us that, when the liquidity shock is between 0.51 and 0.87, the best rescue way is the combination of swap agreement and international reserves, and the correspondent optimal interval of swap agreement is 0.0033~0.4704. By comparison, the magnitude generally below the optimal interval of swap agreement for “The Belt and Road” countries from China.

Session 4.3

Chair: Erik Snowberg

Songfa Zhong; National University of Singapore, Joshua Lanier; University of Oxford, Bin Miao; Shanghai University of Finance and Econo, John Quah; Johns Hopkins University

Intertemporal Consumption with Risk: A Revealed Preference Analysis

The canonical way of representing preferences over among risky consumption streams is to combine the expected utility and discounted utility models. The resulted discounted expected utility model is separable across both states and time, and has a strong implication: the coefficient of relative risk aversion is the reciprocal of the coefficient of intertemporal substitution. Partly because this relationship has been repeatedly confounded by data, alternative models have been proposed by dispensing with either separability across states or separability across time. In this paper, we report a new experiment to elicit preferences of subjects over risky consumption streams, and derive revealed preference methods to test alternative hypotheses. Our results broadly support the separation of preferences across states but not across time. Furthermore, the data are consistent with the same sub-utility functions in the two states with positive time preference over intertemporal consumption.

Yan Wang; Nanyang Technological University, Yohanes Riyanto; Nanyang Technological University, Yew kwang Ng; Nanyang Technological University

Persuading Buyers to Embrace Socially Responsible Act: an Experimental Investigation

We experimentally investigate social responsible behaviors in the market with negative externality imposed on uninvolved third parties. Employing laboratory experimental paradigm introduced by Bartling, Weber & Yao (2015), with a 2x2 design, we incorporate the practices of persuading (a form of social pressure) buyers to be socially responsible into a basic market setting as well as vary production cost. This article formulates proposition and elaborates on how persuasion (as an intervention) influences the socially responsible behaviors of market participants. We highlight that persuasion positively influences socially responsible assumption and number of socially responsible products offered by suppliers. How market participants achieve a balance between profit maximization and social impact of their product choice and their underlying motives of socially responsible behaviors are also examined in this article. Our

results yield valuable insights into the possibilities and limitations of promoting socially responsible behaviors and provide experimental evidence of positive effects of persuasion on promoting social responsibility for future policy consideration.

Jie Zheng; Tsinghua University, Guangying Chen; Tsinghua University

How Does Time Scarcity Influence Individual Performance In A Multi-tasking Context

In a multi-tasking context, time scarcity in one task may not only distract individuals from other tasks, but also draw their attention to focus on this urgent task. By introducing individuals' limited cognitive resource, we set up a model to consider both budget effect (due to "income" change) and the reallocation effect (due to "price" change) effects on individuals' performance. We further design a dual-task laboratory experiment that includes a digit-memorization task and a slider task to test the existence of both effects. Tighter time constraints on the either task are manipulated by adding three evenly distributed intermediate deadlines. The results show that more deadlines on one task decline individuals' total task performance. Comparing subjects' performance in each task among three treatments, we could demonstrate that both budget effect and reallocation effect exist, and the former one plays a dominant role. Moreover, the deadline effects are stronger when the intermediate deadlines are imposed on the cognitively demanding task. Surprisingly, we also find that individuals' decision on time allocation is not influenced by the number of internal deadlines, which further verify that the deadline effects result from the deprivation and reallocation of limited cognitive resource.

Phaik Nie Chin; Universiti Sains Malaysia

The Effect Of Traders' Cognitive Biases On Psychological Attributes And Confidence In Stock Trading: An Experimental Study

This paper aims to examine the relationship between cognitive biases (i.e., confirmation bias, self-serving bias and hindsight bias), psychological attributes of confidence (i.e., miscalibration, better than average effect and illusion of control) and overconfidence bias among individual traders, with trading volume and price prediction error as the proxy. The study is divided into a control

treatment and two sub-main treatments. Subjects with and without cognitive bias are identified through a card game, group price prediction game and pre-experimental price prediction in the experiment. The measurement of psychological attributes of overconfidence was collected through a questionnaire in the experiment, and the trading volume and price prediction error were deduced from a simple trading mechanism. The results suggested that there is significant relationship between confirmation bias and miscalibration, and self-serving bias and better than average effect. However, there is no significant relationship between hindsight bias and illusion of control. Traders tend to make decisions based on their intuition, which leads to confirmation bias and self-serving bias. These biases cause traders to display miscalibration and better than average effect, and thus, display overconfidence bias in their decision-making in the securities market. Subjects with confirmation bias made larger price prediction error compared with subjects without confirmation bias, and subjects with self-serving bias traded more than subjects without self-serving bias. The findings explain the cognitive and psychological reason behind overconfidence bias.

Session 4.4

Chair: Kwanho Shin

Naoyuki Ishimura; Chuo University

A Modelling Approach To The Insurance Policy Design For The Risk Of Epidemic Outbreaks

Epidemic outbreaks have been sometimes observed in recent years and once an outbreak occurs, it has resulted in a tremendous impact on modern society, especially in East-Asia countries. Examples include, SARS (Severe Acute Respiratory Syndrome), Ebola virus diseases, MERS (Middle East Respiratory Syndrome), dengue and/or Zika fever and so on. Insurance companies have a potential to mitigate the effect of these tough events and they have an obligation to take such risk. In this talk, we introduce a simple stochastic model for estimating a possible risk of epidemic outbreaks so that insurers are able to motivate and formulate the policy design. We here extend and refine our previous work.

The construction of our model is based on several apparently different ingredients. The first one is a rough estimate on ultimate number of removals. This is given through the so-called threshold theorem, which is originally due to Kermack and McKendrick. This part depends on what types of epidemics we are discussing. We focus on dengue fever type diseases. The second point is the onset of epidemic outbreaks, which is modelled by the (doubly stochastic) Poisson process. The model is then classified according to the involvement of market risk. If the market risk is taken into account, then the treatment proceeds similarly as to the catastrophe options. While the market risk is not taken into account, then we simply compute the risk model. In any case, we can compute and estimate the risk of an insurer.

Yulin Liu; Chongqing University, Leifei Lyu; Chongqing University

Optimal Contracts And Portfolio Performance Of Basic Endowment Insurance In China

Like most countries, China is facing a rapidly ageing population, which causes increasing concern of basic endowment insurance. Previously, the insurance can only be deposited in the bank with a meager 2% of return rate on average. However, according to a recent report released by Chinese government in 2015, it can invest to different risky assets in the capital market now. However, the report does not present specific strategies to guide that how to invest the insurance. In order to solve above problems, this article proposes a principal-agent scheme by using the experience of most industrialized countries. Based on Dybvig et al.(2010), this article shows how the model in that paper can be applied to optimal contracts of basic endowment contracts in China, as well as implementing two useful extensions: substituting log utility function with CRRA utility function to examine the impact of different coefficient of relative risk aversion and solving optimal investment portfolios. A linear optimal contracts can be obtained in this paper, which provide incentives to the manager as well as risk sharing. The results of this article imply potential significant policy implications.

Yiyi Liu; GuiAn New District Development and Investment Co.Ltd, Steven Rosefielde; University of North Carolina at Chapel Hill

The Logic Behind Application Of Asset Backed Securities In Public Private Partnerships

The government contingently utilizes government purchase, local public debt (municipal bond), Public Private Partnership (PPP), Asset Backed Securities (ABS)-PPP and so to find the optimal provision method for various public services. Such provisions through private markets fail because there lacks a price measurement for the externality. By trading an upfront investment with the control of public services' usage right in the future, private sector firms bypass the externality dilemma associated with the ownership of public services. ABS-PPP then innovates to be a long-term dynamic financing solution for public services' provision where private sector firms resort to financial markets for liquidity reconciliation of the inventory investment. We study the incentives of PPP participants with the ABS exiting mechanism. The paper interests in characterizing the type that suits for ABS-PPP as the provision method, and how the characteristics affect the provision efficiency. This paper also answers the question: why go through such ABS-PPP circulations to request financing instead of directly issuing municipal bond on the financial markets?

Session 4.5

Chair: John Strauss

**Tien Manh Vu; Asian Growth Research Institute and Osaka University and
Hiroyuki Yamada; Keio University**

**Convergence Of Public And Private Enterprise Wages In A Transition
Economy: Evidence From A Distributional Decomposition In Vietnam,
2002-2014**

We examine the transition of state-owned enterprises (SOEs) in Vietnam from a wage perspective by decomposing the difference in wage distributions between SOE employees and non-SOE employees during the period 2002–2014. In 2002, SOE employees enjoyed higher pay than non-SOE employees owing to characteristics difference and any factors other than either the price of skills or the characteristics difference, so-called residuals difference. University graduates were the main contributor to the endowments difference. However, we found that SOE pay schemes converged with those of non-SOEs by 2014, in terms of both the price of skills and residuals.

Hao-Chung Li; National Chengchi University

**The Effects Of Global Competition From China On Taiwanese Labor
Market**

This paper investigates how intensified global competition from Chinese products affect Taiwanese labor market from 1990 to 2011. We find that intensified Chinese competition is associated with a decrease in manufacturing employment, with the brunt of impacts borne by low- and middle- education level workers. We also find that a lengthier industry quality can shield low-education level workers from more competition, but initially quality advantageous industries are more likely to lower low-education level worker employment when facing increasing Chinese competition. Our wage regressions suggest that among manufacturing industries an increase in Chinese competition does not affect high-education level workers' wages but is associated with a decrease in non-high education level workers' wages. We further find that while workers with less desirable human capital might be forced to leave with

intensified competition, those most capable workers are also more likely to leave manufacturing, probably voluntarily doing so in order to avoid future competition.

Debasmita Basak; University of Nottingham

Union bargaining power and product innovation: relevance of the preference function

We show the effects of the bargaining power of labour unions on product innovation under decentralised and centralised wage bargaining. In this context, we show the implications of preference function, which affects the market size. A higher union bargaining power increases innovation if bargaining is decentralised, the market expansion effect is weak and the cost of innovation is moderate but low. Otherwise, a higher union bargaining power reduces innovation. Hence, whether a higher union bargaining power increases or decreases product innovation depends on the type of wage bargaining, market expansion effect and the cost of innovation.

Kunio Tsuyuhara; University of Calgary

Making Do With Less? Workers' On-the-job Effort And The Role Of Macro Effects

How do macroeconomic conditions affect workers' on-the-job effort? How does it feed back to the macroeconomy? Contrary to general perception, Lazear, et.al. (2016) find that the labor productivity of a firm with multiple plants across the U.S. actually increased during the recent recession, and show that the productivity gains appear to be from increased worker effort (making do with less), rather than a changing workforce composition (i.e. more productive workers retaining their jobs). This paper investigates these questions using a macro model of dynamic incentive contracting in an economy with search frictions in which the interaction between worker effort on the job and macroeconomic environment is explicit. Though the calibrated model does not show an increase in aggregate productivity, it shows that the workers exert similar amount of effort on-the-job despite lower wages during the recession due to fear of losing jobs. The model also introduced a limited duration for unemployment insurance (UI) benefits. It creates endogenous heterogeneity

among unemployed workers in terms of remaining UI duration. The results show that varying the UI scheme in generosity dimension and in duration dimension affects worker effort and resulting macro effects substantially differently. It suggests that extending the UI duration has much smaller adverse effects on labour market and macroeconomic outcomes that result from moral hazard of both employed and unemployed workers.

Session 4.6

Chair: Jongsay Yong

Kazuya Masuda; Hitotsubashi University

**Breaking The Intergenerational Transmission Of The Poor Health?
Maternal Education Effects On Private Health Investment And Child
Health : Evidence From Natural Experiment In Benin**

Association between mother's education and child health has been widely documented in the literature. The evidence on the causal relationship is, however, limited, in particular, in least developed countries. To fill in such gap in literature, this paper examines the maternal education impact on the probability that their child suffers from stunting and underweight in one of the lowest income countries; Benin. The present study uses the introduction of fee-free primary education program that exclusively targeted girl as a natural experiment. The across-cohort discontinuity in the exposure to this program allows me to identify the causal effects of maternal schooling on the wide range of child health outcomes. The results suggest that attaining another year of schooling, by mother, reduces the incidence that their child suffers from stunting and underweight by 3-6 percentage point. This results suggest that the program improving the girl's access to school in developing country has a large and long-run positive externality on the human capital of the next generation. The analysis of the mechanism behind this causality shows that such schooling gain improved mother's sanitation behavior, and feeding practices. Furthermore, safer place of delivery, neonatal and postnatal care usage were positively associated with maternal schooling. These findings suggest that the children of educated mother is more likely to avoid the exposure to the risk of preventable diseases. The present study, therefore, underscores the importance of role of female education in breaking the cycle of intergenerational transmission of the poor health in least developing countries.

**Piyachart Phiromswad; Sasin of Chulalongkorn University, Takeshi
Yagihashi; Old Dominion University, Juan Du; Old Dominion University**

Searching For The Empirical Linkages Between National Health And Economic Growth

The paper examines the causal relationship associated with national health and economic growth. Utilizing the large cross-country dataset that spans over 100 countries and 100 variables, and employing the mix of machine-learning algorithm and dimension reduction technique, we demonstrate how robust the existing studies on the causal relationship between the national health and economic growth (unidirectional, bidirectional, or nonexistent) are to the choice of health-related variable. There are three main findings. First, we confirm that many of the available health-related variables are clustered in nature, which indicates that choosing one proxy out of the potential many are not an innocuous task. Second, we show that life expectancy and public health expenditure to GDP ratio, both of which are commonly used as the proxy of health outcome in growth regressions, are not suited for analyzing the effect of health on economic growth, partly because they are likely to represent other socio-economic variables in addition to health outcome. Finally, we suggest new use of health-related variables in the context growth regression, either as an instrument variable or being instrumented by other set of variables.

Margeret Triyana; Nanyang Technological University, Notre Dame

Scarring Versus Selective Mortality: The Long-term Effects Of Early Life Exposure To Natural Disasters In The Philippines

This paper analyzes the long-term effects of early life shocks with varying degrees of severity on mortality and survivors' human capital in the Philippines. We combine the Philippine census and historical typhoon data from 1945 to 1990 to exploit variations in both the geographical path and intensity of typhoons. We found adverse effects of in-utero exposure to severe typhoons. These adverse effects are intensified in southern Philippines where residents are less familiar with typhoons. Moreover, sharp changes in disaster response policies after Ferdinand Marcos resumed office allow us to disentangle selective mortality from the long-term scarring effects of adverse shocks. Before the Marcos regime, in-utero exposure to severe typhoons led to significantly higher levels of mortality; however, the surviving cohorts on average exhibit similar levels of human capital as unaffected cohorts. Under the Marcos regime, when disaster relief funds were limited but more available than earlier periods, in-utero

exposure to severe typhoons had little impact on mortality but significantly reduced survivors' education attainment and occupational prestige.

Muhammad Nasir; Pakistan Institute of Development Economics

Prenatal Exposure to Shocks and Early-life Health: Impact of Terrorism and Flood on Birth and Pregnancy Outcomes in Pakistan

Simultaneous exposure to natural calamities and conflict shocks is a phenomenon that has been largely understudied. The interplay between natural disasters and conflict shocks can have adverse effects extending beyond the current family members to children in utero. The current paper tries to fill this gap by investigating the impact of floods on pregnancy and birth outcomes across conflict-affected and unaffected districts in Pakistan. Using mother fixed effects strategy in a triple difference framework, the results suggest that in-utero exposure to flood in conflict-affected areas increases the probability of small birth size by 8.1 percentage points. Moreover, exposure to violence in non-flooded districts reduces the likelihood of small birth size by 5.6 percentage points but increase the probability of miscarriage by 3.7 percentage points, thereby suggesting selection into birth. Significant heterogeneities are found across place of residence, income groups, and education levels.

Session 4.7

Chair: Ahmet Faruk Aysan

**Sawarai Boonyamanond; Chulalongkorn University, Papusson Chaiwat;
King Mongkut's University of Technology Thonburi**

Family Power And Its Role In Economic Sustainability Of The Thai Households

This study examines the impacts of several dimensions of family power on Thai household economic sustainability. Based on the Household Socio-Economic Surveys, the Family Economic Sustainability Index (FES Index) has been constructed into 2 components, which are 1) sustainability of family income, and 2) wealth and assets of the family, by using the principal components analysis (PCA). Although the indices have shown a gradual increase between 2006 and 2015, they remain at low levels on average, reflecting a large dispersion in economic strength among households in the country.

The results of a multiple regression analysis point out that single-parent families with more than 2 children (aged below 15) are among the most vulnerable family structures due to higher risk of having insufficient income to maintain their expenses and lower wealth and assets than other single-parent families. Likewise, single-parent, 3-generation, and skipped-generation families resided in a rented house are likely to face lowest economic sustainability. Such vulnerability will be particularly pronounced for families in which income earners are agricultural, forestry, or fishery workers, economically inactive, or have high expenditures on tobacco and alcoholic beverages. While households receiving financial support from any non-family or fringe benefits tend to enhance household economic strength, those benefiting from the government provisions of free healthcare, education loan, or microcredit are prone to weak economic status, at least in a short run. Despite a positive effect of family ties, as measured by remittances from family members, on household economic sustainability, they have become of less importance throughout the period of study.

Chayanee Chawanote; Thammasat University

Vietnam Structural Transformation: the Role of Local Institutions on Nonfarm Businesses

Ever since Vietnam implemented Doi Moi Policy in 1986, Vietnam has changed into more market-based economy with decentralization to private sector and local government, and more degree of openness. Vietnam experienced substantial structural transformation with increasing roles of nonfarm business in both household and firm levels. According to the New Structural Economics framework, state also plays an important role in facilitating structural transformation. This study, therefore, using Vietnam provincial data on nonfarm business establishment and provincial competitiveness index (PCI) during 2011-2014, investigates the roles of local institutions on nonfarm business. This provincial competitiveness index measure the quality of local governance by surveying perceptions of private sector businesses on many aspects (10 sub-indices), such as entry costs, access to land, transparent business environment. There will be certain indicators of local institutions effectiveness, outside PCI, and instruments to also check sensitivity of local governance. Preliminarily, we observe that higher PCI scores are associated with more nonfarm businesses. In more details, informal charges and business support services statistically significantly influence more nonfarm businesses. Business support services also have positive relationship with business turnover per establishment and capital per establishment. Moreover, we are exploring the roles of nonfarm business in Vietnam structural transformation into manufacturing and services sectors at the provincial level. Hence, the study could shed some light on structural development policies in transition economy.

Daiju Aiba; Hitotsubashi University, Ken Odajima; JICA Research Institute

Foreign Currency Borrowing And Risk-hedging Behaviors: Evidence From Household Survey In Cambodia

Foreign currency borrowing, a phenomenon sometimes referred to as financial dollarization, is a growing issue in developing countries. This study investigated the determinants of foreign currency borrowing behavior of households in Cambodia using household survey data; and this allowed use of the currency-wise information in tracking households' financial activities. We found that Cambodian households engage in risk-hedging behavior against exchange rate risks, and are likely to borrow in a foreign currency if this makes up the major

portion of their income stream. We also found that expectation of a depreciation of their local currency leads households to take out local currency loans in line with the predictions of theoretical models. Furthermore, education plays a role in the choice of currency for loans; the better educated households are more likely to engage in risk-hedging behavior, and to seek to match the currency composition between loans and income, than the lesser educated are. We also found that variables related to the use of financial services are also positively correlated with the intensity of risk-hedging behavior against currency mismatches. These results suggest that financial literacy has the potential to enhance risk-hedging behavior against exchange rate risks for Cambodian households.

Mayang Arum Anjar Rizky; SMERU Research Institute

Intergenerational Transmission Of Risk And Trust Preferences: Evidence From Indonesian Household Survey

This study investigates the intergenerational correlation of risk and trust preferences using cross sectional data from Indonesian Family Life Survey (IFLS) 2007. A model in cultural transmission is used as an approach of this study. The findings are consistent to some extent with an empirical evidence in Germany that parents do transmit risk and trust preferences to their children. It is also influenced by the preferences in the community and the shared similarity between the father and the mother. Although both father and mother are shown to have a significant influence on their children, the share of magnitudes among them differ between preferences and across contexts.

Session 4.8

Chair: Kian Teng Kwek

Benjamin Montmartin

When Geography Matters For Growth: Market Inefficiencies And Public Policy Implications.

We propose a unique market and social planner solution for a generalized New Economic Geography and Growth model to highlight the importance of taking account of the existence of agglomeration externalities in an analysis of market inefficiencies, which allows us to provide some important implications for public policy. This framework among other things, allows us to disentangle an insufficient growth condition from an under-investment in R&D condition which in turn allows us to explain various market steady state situations. For instance, it provides an explanation for situations where the market economy grows too slowly and over-invest in R&D (as opposed to an a-spatial model). By evaluating the effects of two strategic policies, namely innovation policy and industrial policy, on market inefficiencies, we show that (1) the efficiency of a policy evolves strongly with the market economy situation and no policy is the most efficient in all situations, (2) the geography of economic activities and the question of over or underagglomeration of the market economy plays a central role on the relative efficiency of policies and (3) industrial and innovation policies are only partially complementary but policy-mixes can be justified if some market gaps are more important than others.

Donghyun Park; Asian Development Bank, Philippines

The Landscape Of Economic Growth: Do Middle Income Countries Differ?

We review the growth experience of middle-income countries using the standard definition of the category adopted for this project. Economic factors associated with growth appear to differ between middle-income and other countries. The efficiency of the financial system is importantly related to the growth rate in low- and middle-income countries (working in the expected direction) but appears to matter less, relative to other factors, as one moves up the income scale. Demographic variables also matter importantly in low-income countries.

In middle income countries, in contrast, measures of the financial system no longer appear to matter as importantly, as if inefficiencies in banking and finance system are no longer as binding a constraint as at earlier stages of financial development. Nor are demographic variables as important as before. At this point, other variables gain a growing role: these include whether or not the country experiences a banking or currency crisis (which affects current growth negatively), the extent of non-FDI capital inflows (which affects growth negatively), and government debt as a share of GDP (which again affects growth negatively).

**Falguni Pattanaik; Indian Institute of Technology Roorkee, Nitin Bisht;
Indian Institute of Technology Roorkee**

Economic Freedom And Human Development: A Cross Country Analysis

The objective of this study is to examine the impact of economic freedom on human development, as economic freedom is believed to expedite wide array of economic and social developments. For this purpose, the study engages panel data model on 158 countries listed in economic freedom index for a period of 14 years (2001-2014). Further, the direction of relationship and significance of economic freedom along with its sub-areas on human development and its allied indices are explored. The results suggest that, economic freedom is having a significant and positive bearing on human development index across the countries. Further, while exploring the impact of different sub-areas of economic freedom it has been observed that, other than area 1 (size of the government) and area 4 (freedom to trade internationally) are having positive impact on human development index. Furthermore, while examining the impact of economic freedom on individual indices of human development index, it has been observed that, economic freedom has also positive impact on health index, education index and income index across the countries. However, different sub-areas of economic freedom influence individual indices of human development index in a different manner. Therefore, it can be concluded that, higher human development can be out stated as the long-run results of sustained economic growth in a country as economic freedom directly influences economic growth in short-run which in longer-run paves the path for achieving human development.

Elya Nabila Abdul Bahri; National University of Malaysia

Does Too Much Finance Harm Growth?: pre And Post Global Crisis Analysis

The existing studies found that the relationship between financial development and economic growth is nonlinear and exist economic Kuznets curve or inverse U-shape, where financial development will harm after surpassed the threshold point. The objective of this study is to investigate the nonlinear relationship between financial development and economic growth for 65 developing countries from 1980-2015 with splitting the sample by using Generalized Method of Moment (GMM). Three financial deepening indicators namely, domestic credit to private sector (DCPS), liquid liabilities (LIAB) and private credit to deposit money (PCDM) are used in this study. We split the sample before and after global economic crisis in 2008. The result from our study, however, the finding is contrast from the past literature for 2009-2015 subsample. The result based on the data from 2009-2015, interestingly, the relationship of financial development and economic growth is nonlinear but anti-Kuznets curve or U-shape for all indicators. Financial development will accelerate economic growth after reached the turning point. The results of the Sasabuchi-Lind-Mehlum test also confirmed the nonlinear mixture of inverse U-shape for first subsample but U-shape for second subsample. It shows that the higher financial development will improve better performance on economic growth for the recent economy. Thus, our results encompass previous findings and suggest the recommendation for policy review.

Session 5.1

Chair: Isamu Ginama

Nicholas Sim; University of Adelaide

ALIVE

An instrumental variable (IV) that is uninformative about the conditional mean of the endogenous regressor is said to be irrelevant. However, although such an IV could affect the conditional distribution of the endogenous regressor, these effects are not exploited for estimation and identification in practice. In this paper, we discuss a new regression technique, dubbed the Asymmetric Least Squares IV Estimator (ALIVE), that enables us to utilize the information that an IV has on the conditional distribution of the endogenous regressor to estimate the impact of this regressor on the outcome of interest. We show that consistent estimation is feasible using ALIVE if the IV is relevant for the distribution of the endogenous regressor, even if it is irrelevant for the conditional mean. We also show that if the exclusionary restriction is violated, we may (under certain conditions) use ALIVE to obtain a point estimate with a smaller asymptotic bias than that contained in the IV estimate.

Lance Fisher; Macquarie University, Hyeon-seung Huh; Yonsei University

Combining Sign And Long-run Parametric Restrictions In A Weak Instrument Case: Monetary Policy And Exchange Rates

In a SVAR for four small open economies, sign restrictions together with parametric restrictions are used to separate the shocks using the instrumental variable (IV) method of Ouliaris and Pagan (2016). The long-run restriction we utilise is that the monetary policy shock has a zero long-run effect on the real exchange rate. Because there is a 'weak' instrument problem associated with the long-run restriction, the IV method breaks down. This paper develops a procedure in conjunction with their method which circumvents this problem. When this procedure is implemented, we find that none of the accepted responses for Australia and Canada show an exchange rate puzzle. For New Zealand fewer than five percent show an exchange rate puzzle, while for the

United Kingdom it is substantially more. In Australia, Canada and New Zealand, there is a systematic monetary policy response to a real exchange rate shock but not in the United Kingdom. JEL Classification: C32, C36, C51, F41

Jin-Young Choi; Goethe University Frankfurt

Semiparametric Estimator For Binary-outcome Sample Selection: Prejudice Matters In Election

We propose a semiparametric estimator for binary-outcome sample-selection models that imposes only single index assumptions on the selection and outcome equations without specifying the error term distributions. We adopt the idea in Lewbel (2000) using a special regressor to transform the binary response Y so that the transformed Y becomes linear in the latent index, which then makes it possible to remove the selection correction term by differencing the transformed Y equation. There are various versions of the estimator, which perform differently trading off bias and variance. We conduct a simulation study, and then apply the estimators to US presidential election data in 2008 and 2012 to assess the impact of racial prejudice on the elections, as a black candidate was involved for the ...rst time ever in the U.S. history.

Juan Lin; Xiamen University

A Flexible Copula Specification Test Under Censorship

We propose a copula specification test for copula-based multivariate survival models under censorship. This flexible test is applicable to both Archimedean and non-Archimedean copulas and provides useful pointers for alternative copula construction when a null distribution is rejected. It is shown to be consistent and asymptotically distribution free. We demonstrate its good finite sample performance via Monte Carlo simulations. Two empirical applications illustrate the usefulness of this test.

Session 5.2

Chair: Parkash Chander

Teck Yong Tan; Columbia University

The Extrinsic Motivation of Freedom at Work

Why does a worker become more efficient when given freedom at work? Under incomplete contracts, a worker faces a ratchet effect of innovating when he is closely monitored: if the worker uncovers a more efficient production method, the firm, being aware of it, raises the future performance requirement; anticipating this, the worker never tries to innovate. When given freedom at work instead, the worker accrues private information about his innovation. The resulting information asymmetry generates information rent which feeds back as the worker's incentive to innovate and improve efficiency. This paper studies how a firm's strategic ignorance influences its incentive structure which has to simultaneously induce effort from the worker and endogenously generate asymmetric information against the firm. The resulting mechanism provides a novel rationale to why relationships are sometimes characterized by weak incentives and low-scale production at the early stages.

Yu Zheng; City University of Hong Kong, Bin Wang; City University of Hong Kong

A Model of Tournament Incentives and Corruption

The growth-generating Chinese institution, or the regionally decentralized authoritarian (RDA) regime, features decentralized economic management in a centrally controlled personnel promotion exercise. Local officials compete with each other for ascending through the ranks by generating local economic growth. From the personnel economics point of view, the tournament-type compensation scheme implied by the RDA regime requires the existence of high-powered incentives across the bureaucratic ranks, which is at odds with the public-sector pay scale observed in China. Corruption income must be part of the story, but the very RDA regime precludes the possibility of promising a large sum of corruption at the top of the bureaucratic ladder. We propose a modified version of the "capitulation wage" which is nevertheless consistent with the key features of the RDA regime.

Fuhai Hong; Nanyang Technological University, Tat How Teh; National University of Singapore

Bureaucratism, Corruption, and Firms' Environmental Investment and Abatement

Bureaucratism and corruption are prevalent in developing countries. This paper presents a delegation model where a government authorizes an inspector to monitor a polluting firm. The inspector may shirk in monitoring, and may corrupt when discovering non-compliance. We distinguish two types of environment-friendly actions, emission abatement and investment that enhances abatement technology, and investigate how bureaucratism and corruption affect firms' incentives of taking these actions. A corruptible inspector exerts more effort in monitoring the firm (an effort-inducing effect), but fails to enforce environmental regulations when discovering non-compliance (a non-enforcement effect), compared to a bureaucratic inspector. Moreover, the firm strategically makes more investment to reduce the corruptible inspector's monitoring effort (a strategic effect on monitoring). We find that only when the corruptible inspector has small enough bargaining power, a larger proportion of corruptible inspectors decreases investment and abatement. Moreover, the corruptible inspector's higher bargaining power leads to higher investment and abatement.

Shailu Singh; Delhi School of Economics

Patents And Market Value

This study explores the association between the use of patents and firm market value using a matched panel dataset of 380 firms belonging to Indian manufacturing spanning the period 2001-2010. While on average patenting firms do have higher market values than non patenting firms, the same cannot be said when patent stocks are employed to measure the use of patents. Though for the average firm there does not exist any relationship between patent stock and firm market value, quantile regression results indicate that patents do matter at the lower end of the distribution of firm market value. JEL Codes; D21, O31, O32, O34 Keywords: Innovation, Patents, Firm Tobin's Q

Session 5.3

Chair: Margeret Triyana

Ian Li; The University of Western Australia, Peter Sloane; Swansea University

Vertical, Horizontal And Skills Mismatch In The Australian Graduate Labour Market

Studies of the Australian graduate labour market have found substantial incidences of vertical mismatch, as well as substantial earnings disadvantages. This study extends the literature by examining horizontal mismatch, an important dimension of mismatch in its own right and which has been less studied, particularly for Australia. A substantial amount of Australian university graduates are found to be vertically, horizontally or skills mismatched, although these incidences are generally reduced in the longer term. Graduates from fields of study which are more occupation-specific were found to be less likely to be mismatched in comparison to those from occupation-general fields, but experience larger earnings penalties if mismatched.

Saizi Xiao; University of Malaya, M Niaz Asadullah; University of Malaya

Labor Market Returns To Education And Language Skills In Post-reform China: An Update

Using the China General Social Survey (CGSS) 2010 data, this paper re-examines the economic returns to education in China. In addition to minimizing the concern over omitted variable bias by simultaneously controlling for three factors that have been ignored in the earlier studies - height, body-mass index and language (English) skill - we implement instrumental variable (IV) technique to address endogeneity problem of schooling variable. The IV estimate (using parental death during the childhood and parent's schooling as excluded instruments) of returns to schooling in China is 16 percent against the OLS estimate of 8 percent. Moreover, there is substantial heterogeneity in returns: schooling-earning profile is convex, with gains from schooling rising sharply across levels of education. Estimated return in urban location is nearly three times higher than that in rural areas. Additionally, the returns to language skill is highest in coastal provinces that have benefited most from foreign investment and industrial developments. Among other findings, while taller people earn more and wages are lower for obese individuals, controlling for height and obesity doesn't significantly reduce the estimated returns to schooling and skills. Results are robust to correction for sample selection bias based on Heckman two-step procedure. Overall, the findings and our review of the published studies

on returns to education in China confirm the growing significance of human capital as a key determinant of labor market performance in post-reform China.

Jin Ho Kim; The George Washington University

Minimum Wage And Women's Decision Making Power Within Households

The importance of empowering women has been recognized as a key development goal by major development institutes such as the World Bank. In this paper, we are interested in the role of broad labor market policies on female empowerment in developing countries. Specifically, we study empirically the effect of minimum wages in Indonesia on women's role in decision making in the household. Despite the well-established theory of the household that predicts that the labor market environment is a key factor in household decision making, there is little empirical work that investigates this link in developing countries for broadly implemented policies such as the minimum wage. Using province-specific minimum wage increases in Indonesia from 1997-2014 and data from a panel of Indonesian households, we implement a method that exploits differences in minimum wages between geographically proximate districts located near the border between separate provinces. We find a positive and significant effect of minimum wage on the wife's role in making decisions related to household production. On the other hand, we find a negative and significant effect for decisions relating only to resource allocation. We reconcile these findings by first showing that minimum wage has a positive and significant effect on labor force participation for men but a negative effect for women. These findings contrast with other research showing that higher minimum wages reduce the gender wage gap. Our results indicate that in some dimensions higher minimum wages may not benefit women and thus the overall welfare effect is ambiguous. We argue that these findings are consistent, however, with existing theories of the household.

Eric Ramstetter; Asian Growth Research Institute

Foreign Workers, Foreign Multinationals, And Wages In Malaysia's Manufacturing Plants After Controlling For Occupation And Sex During The Mid-1990s

This paper investigates the effects of foreign worker shares and MNE ownership on wages after controlling for worker sex and occupation in Malaysian manufacturing plants during 1994-1996, an important period during which use of foreign workers began to increase substantially. In a previous paper, I estimated similar wage equations separately for five occupation groups of both sexes in large heterogeneous samples of plants in many industries and more homogeneous samples of plants in seven industries. Results indicated that use of foreign workers generally had insignificant effects on plant wages for most occupation-sex-(and industry) combinations and that MNE-local differentials were almost always insignificant in three industries and consistently significant in only one. Although separate estimation by sex and occupation has the strong advantage of accounting for worker characteristics relatively well, it has the disadvantages of complexity (10 results per sample) and being difficult to compare to more common approaches, which use sex and occupation as controls. The primary purpose of this paper is thus to see if using sex and occupation as independent variables generates results that differ from estimating wage equations separately for each sex-occupation cohort. Results suggest that the effects of foreign worker shares differ substantially among foreign worker occupations and among industries. Plants that have relatively large foreign manager shares tend to pay relatively high wages in most industries, but the effects of other foreign worker occupations are usually insignificant or inconsistent. Results that assume all foreign workers impart the same effects thus appear misleading, as do results assuming identical slope coefficients among industries. Similar to previous estimates, MNE-local wage differentials were consistently positive and significant in only two relatively small industries, chemicals and food, in marked contrast to previous results for 2000-2004, which did not account for the effects of foreign worker shares.

Session 5.4

Chair: David Lee

Woon Wong; Cardiff Business School, Laurence Copeland; Cardiff Business School, Craig Thamotheram; Cardiff Business School

Liquidity Variation And Stock Market Returns

Contrary to expectation, Chordia et al. [Journal of Financial Economics, 59, 3 (2001)] find that liquidity variation is priced negatively. Several subsequent

studies provide opposing results. Notably, Barinov [Journal of Banking and Finance, 58, 457 (2015)] provides empirical evidence that casts doubt on Chordia et al.'s result whereas Akbas et al. [SSRN-id1786991] show that a positive premium is obtained if the liquidity variation is calculated using daily price impacts. Nevertheless, the empirical evidence and calibration results (of a model based on a fully rational, utility-maximising investor) provided by Pereira and Zhang [Journal of Financial and Quantitative Analysis, 45, 1077 (2010)] explain why liquidity variation is priced negatively. Intuitively, their results can be attributed to the rationale that stocks with more variable price impacts provide more opportunities for investors to trade at a lower cost when price impacts are small (thereby giving rise to a negative premium). Such arguments are persuasive but the issue of whether liquidity variation is negatively or positively priced remains controversial.

We are able to shed light on the controversy described above by theoretical analysis as well as providing new empirical evidence. Specifically, the theoretical analysis is based on a quadratic utility model in which liquidity premium is defined as the additional return required to compensate for the uncertainty of price impacts. Our closed form solutions show that (1) liquidity variation commands a positive premium if investors have to trade immediately; (2) assuming that the cost of waiting is zero or small, the liquidity variability premium is lower if investors have an option to trade later; (3) if the price impacts are normally distributed and the waiting cost is zero or small, the liquidity variation is negatively priced due to the value of the option (to trade later); (4) liquidity variation is positively priced if the price impacts are exponentially distributed, regardless of waiting cost and availability of the option to trade later. Empirically, the price impacts are found to be exponentially distributed and hence liquidity variation should be positively priced. The Pereira and Zhang calibration results of negative liquidity variation premium are reversed when liquidity shocks are assumed to be exponentially distributed. Finally, we find that Chordia et al.'s liquidity variation constructed from monthly turnover contains information associated with negative news about the firm's fundamentals, and hence it is negatively related to stock returns. On the other hand, liquidity variation constructed from daily price impacts does not contain such information and is positively priced.

Sanae Ohno; Musashi University

Systemic Liquidity Risk And Measurement Of Connectedness

Although insurance companies were believed to be less vulnerable to systemic risk compared to commercial banks and investment banks, we observed the simultaneous sharp increase of credit default swap spreads of insurance companies during the global liquidity squeeze. This study examines the determinants of CDS spreads of major financial institutions to the effect of the global liquidity squeeze on the financial institutions' creditworthiness. Specifically, the mutual interdependence across financial institutions and between banks and insurance companies was is examined.

Results show that the impact of the global liquidity squeeze on the CDS spreads of insurance companies, particularly those for which the main business is variable annuities with guaranteed minimum payments, was statistically significant, although they had been believed to be invulnerable to systemic risk. Secondly, worsened creditworthiness of banks were more influential to the global liquidity tightening than that of insurance companies. Those results implies that likelihood of systemic risk resulting from the aggravation of creditworthiness of insurance companies is small.

Ros Zam Zam Sapian; National University of Malaysia

Return, Volatility And Equity Fund Flows Linkages: Evidence From An Emerging Market

This study examines the dynamic linkages among market return, market volatility, and equity fund flows of institutional and retail investors both foreign and local into Malaysian Stock Exchange, Bursa Malaysia. Using a total of 1540 daily observations of an aggregate trade data for a period from 1st October 2009 to 31st December 2015, this study finds that market return is positively correlated to net flows of foreign institutions while is negatively correlated to net flows of foreign retailers, local institutions and local retailers. In terms of market volatility-net flows relation, this study reveals that market volatility is negatively correlated to foreign institutional net flows but is positively correlated to net flows of local institutions and retailers. A Granger causality analysis suggests the

existence of bidirectional causality between market return and net flows, particularly net flows of foreign retailers. However, there is a unidirectional causal relation from market volatility to net flows of foreign and local institutions. The findings of this study will benefit most to portfolio fund managers, traders, foreign and local investors dealing with Bursa Malaysia.

Ming-Guang Ma; National Tsing Hua University

A Comparative Analysis Of The Impacts Of Chinese And USA Stock Markets On World Markets

This research addresses the impacts of Chinese and USA country-and industry-specific stock markets on advanced economy and emerging markets during each financial crisis and influential economic activity by an easy-to-implement indicator. This new indicator being in line with the modification of the CD test by Pesaran (2015), a diagnostic test for cross-sectional dependence in panels, is proposed to gauge the extent of co-movements of stock returns across markets. The interlinkages of the Greater China area incorporating the established markets of Japan, USA, UK, Germany and Australia are also included. Empirical results apparently indicate the changing nature of leading roles of Chinese and USA stock markets to the world market, particularly with respect to the timing of specific local information including the reformation of Chinese RMB and the US dollar crisis which both occurred in 2005 as well as the meltdown of Chinese stock market in 2015. Additionally, the interactions among the Chinese, Hong Kong and Taiwanese markets are more prominent than those among Hong Kong, Taiwan and Western and other Asian markets after 2005. These results could provide a possible implication to explain the reason causing the financial crisis in 2007.

Session 5.5

Chair: Te Bao

Niroth Chhy; Kobe University

The Impacts Of Government Consumption On Efficiency, National Income, And Income Inequality

Using a model with heterogeneous producers, this paper considers the impacts of government consumption on efficiency, national income and income inequality. This paper finds that an increase in government consumption has two negative indirect effects. The first is the conventional negative income effect. The second is the toughening of the competition among producers for a limited amount of input. The second negative indirect effect can be stronger than the positive direct effect on producers (i.e., the increase in demand). If this is the case, the markups fall and so does the social welfare gap. Furthermore, with imperfect substitution, the two negative effects disproportionately affect the top producers; and, say under homogeneous productivity, national income and before-tax income inequality will fall, while the after-tax income inequality rises.

Chung Yee Liew; UTAR Perak Campus, Normaz Wana Ismail; Universiti Putra Malaysia, Siong Hook Law; Universiti Putra Malaysia

Inequality And Its Effect On Government Spending On Poverty Reduction In Asian Countries

Poverty is an important issue in Asian countries and government spending is crucial to enhance the opportunity of the poor to escape from poverty. However, rising inequality in Asian countries has been worrying because higher inequality has translated to the unfair distribution of public resources and led to limited benefits transferred to the poor. A dynamic panel comparative study was conducted across Asia countries from 1980 to 2013 to examine the effect of inequality in income distribution on the effect of government spending on poverty reduction. The approach that was applied in this study is included the proxy of equality in income distribution as a conditional variable to examine its effect on the effect of government spending on poverty reduction. The government consumption spending has been worsening the poverty incidence;

however, the estimated coefficients suggest that the interaction term between the proxy of equality in income distribution and government spending has significant and enhancing effect to poverty reduction. This implies that countries with higher equality in income distribution are more likely to lower the poverty incidence through government spending. Government spending plays important role in protecting the vulnerable poor households before they can benefit from the more long-term policies and strategies. Government spending policies need to be pro-poor and designed to ensure that the benefits are for the poor instead of non-poor. The policy is including building up the asset base of the low income households to achieve more equality in income distribution. JEL Code: H50, H52, I32 Keywords: Government spending, poverty, inequality, conditional variable

Cheng Keat Tang; London School of Economics

Do Speed Camera Save Lives?

In this paper, I evaluate the role of speed enforcement cameras in reducing the number and severity of traffic accidents. Speed cameras penalize drivers for exceeding speed limits near the camera housing. Relying on micro data on accidents and speed cameras across England, Wales and Scotland, I find that installing a speed camera is associated with significant reductions in collisions, injuries and deaths. Putting another 1,000 cameras on the roads could save up to 360 lives and reduce 660 serious injuries annually, generating benefits of up to £721 million. These effects are, however, are limited to within 0 to 400 metres from the housing and the first four years from installation, highlighting the possible limitations associated with fixed speed cameras.

Toshihiro Ithori; National Graduate Institute for Policy S

National Emergency, Security Spending, and Growth

This paper investigates a long-run property of national security and economic growth in a political economy using the overlapping generations growth model

of allies. This paper explores crowding-out effect of private privileges on security spending in a dynamic setting. We confirm the exploitation hypothesis of burden sharing among allies. We also show that although the steady-state security spending is too little in terms of the static efficiency (or compared with private consumption) due to the crowding-out effect, it may be too much if private saving is too much in terms of the dynamic efficiency and the penalty ratio is small. In such a case more private privileges could improve the long run welfare. An increase in the penalty ratio in one country will reduce the world-wide capital accumulation and security spending due to the income effect. An increase in the emergency probability in one country depresses its capital accumulation but it may have positive effects on capital accumulation in another country due to the free riding effect of security spending if the spillover effect of security spending is modest. These analytical results illustrate how potential conflicts could occur within allies.

Session 5.6

Chair: Filippo di Mauro

Kittipong Rueanthip; University of the Thai Chamber of Commerce

Financial Constraints And Investment-cash Flow Sensitivity: Evidence From Thai Micro And Small Enterprises

Most of the previous studies on financial constraints concentrate on listed companies and large enterprises. Although some focus on small and medium enterprises, the business size of those firms are relatively large compared to firms in the developing economy. Our objective is to investigate on financial constraints among micro-enterprises since the characteristics of them different from the large companies in many aspects. We use new quarterly data namely Thai Enterprise Panel Survey (TEPS) collected during 2011-2012 (8 waves) to examine which micro-firms are financial constrained. The data covers approximately 2,000 micro/household firms. The framework of investment-cash flow and cash holding-cash flow sensitivity are applied in this paper. Cash flow at various time periods: at time t , $t-1$, and the sum of $(t, t-1)$, are utilized. Our financial constraints criteria come from both firm's self-report and firm's other profiles, for instance, leverage, asset, and firm's age. We find that investment and change in cash holding of firms in all groups are significantly sensitive to cash flow. However, the coefficients between most of two groups in all criteria are insignificantly different as suggested by the interaction term and Chow's test. Only investment of mature firms and cash holding of large firms are significantly more sensitive to cash flow than young firms and small firms. The results suggest that, among small firms, although most of them are financially constrained, older and larger firms seem to have a higher level of financial constraints than the other.

**Xuan Vinh Vo; University of Economics Ho Chi Minh City, Anh Phan;
University of Finance and Marketing**

Herding by foreign investors on equity returns in Vietnam stock market

This paper examines herding by foreign investors and its impact on equity returns in Vietnam stock market. We utilize a three-stage least square method to analyze the sample including firms listed on Ho Chi Minh stock exchange from 2000 to 2017. We also divide the data into pre and post-liberalization stages to clarify the role of foreign investors. Preliminary results show significant impact of herding by foreign investors on stock returns. However, no evidence on the effect of changes in domestic institutional ownership on stock returns is found. In addition, the finding indicates the difference in trading behavior of foreign investors compared to domestic investors.

**Prithvi Hampapuram; Indian Institute of Technology Kharagpur,
Yaswanth Nuthalapati; Indian Institute of Technology Kharagpur**

Effects Of Demonetisation On Indian Banking System

Demonetization is an exercise of stripping a currency unit of its legal tender. On November 8, 2016, this exercise was carried out by the government of India. Last time this exercise was carried was in 1978, albeit with a different motive. While it was with a motive to eliminate the use of high value currency for financing illegal transactions in 1978, the recent demonetization aimed mainly at curbing black money and checking corruption. Other countries have also seen demonetization in the past. The Soviet Union, in 1991, scrapped almost one-third of the currency to curb corruption which led to re-denomination of ruble. Similar exercises in Zaire, Myanmar, Ghana, and Nigeria were performed with little to no success, mostly resulting in loss of public confidence in banking system. India has successfully adapted to changes in currency twice in the past. However, the recent demonetization exercise, was unique in that over 85% of the currency in circulation was scrapped. Cash crunch, spike in unemployment in informal sector, fall in consumption, and decrease in GDP were a few effects that were visible due to demonetization. However, banks, which facilitated the whole exercise of demonetization, have also been affected by it. The recent exercise of demonetization has had impact on all the sectors including banks. There was huge inflow of deposits into due to demonetization. In this paper, we would like to empirically analyze on the effects of demonetization on banks and the factors that resulted in the recent hike in transaction costs. Starting with money market equilibrium, this paper discusses, pre-demonetization conditions

and post demonetization effects on banks. Scenario of corporate sector, increase in deposits and RBI's intervention have been taken into account along with a few other factors. Finally, effort has been made to analyze the scenario of banks in the long run considering food inflation and RBI's stance to control inflation.

Guanie Lim; Nanyang Technological University

Financing Industrialization in Vietnam: Banking on the State?

This paper uncovers Vietnamese industrial financing in the era after Vietnam's 1986 economic reforms. It examines the data regarding sources of industrial finance in Vietnam and suggests some explanations on the country's unique pattern of financing industrialization. The paper also extends the Vietnamese experience by comparing it to those of other regional economies. Lastly, the paper discusses implications to the future of Vietnamese industrial financing, taking into account the maturation of its financial institutions as well as its integration with the rest of the global economy.

Session 5.7

Chair: Ali Khan

Taojun Xie; Singapore Management University, Wolfgang Karl Haerdle; HU Berlin, Rainer Schulz; University of Aberdeen Business School

How Does The Housing Market Respond To Macroprudential Policies? The Case Of Singapore.

House price growth and excessive lending was at the core of the financial crisis in 2007/08. Since then, many countries have supplemented their regulatory regimes with macroprudential policies to guard against systemic risk. Singapore is one of the first countries to apply measures to this effect to the housing market. Several papers provide evidence that such measures can counter overheating of house prices. However, such measures will also affect the real wealth of those owning houses. We assess this for Singapore by testing for stochastic dominance at different orders over all rounds of cooling measures. We find that the social welfare of those owning in the private housing sector is curtailed by the measures, whereas those owning in the public sector are less affected. This outcome fits well with Singapore's intention to ensure that its residents can participate in the country's economic growth by owning public housing. It also indicates that the Singaporean authorities target the measures successfully.

Isha Dayal; National University of Singapore

Impact Of Population Policy On Birth And Fertility Rates: Case Of Singapore

In its development process, Singapore has reached the fifth stage of demographic transition, with decline in birth rates being greater than decline in death rates. Under such a scenario, the country is faced with the public policy issue of aging society, with there being increased burden on the working population to not only support the elderly but also to maintain economic growth of the country. To deal with this issue, Singapore introduced Marriage and Parenthood Act in 2001, which provides childcare support to incentivize married couples to have more

children, with further enhancements made to the policy in subsequent years. However, despite the huge amount of resources allocated to the population policy, there has been no systematic research conducted to test its impact on the birth and fertility rates in Singapore. The present study incorporates a novel approach of utilizing the quantitative method of forecasting in an experimental 'interrupted time series' public policy research design to determine the statistical significance of Singapore's population policy in influencing the country's overall birth and fertility rates as well as the fertility rates for different ethnic groups. The results indicate the policy to have been ineffective immediately post introduction, however there are some positive effects noted post the policy enhancement in 2008, especially for the overall birth rates, and fertility rates among the Chinese. The study also indicates the significance of providing adequate housing, incentives for marriage, and increase in incomes, which are all likely to provide an economic and social environment conducive for couples to start a family in Singapore. JEL classification: J11, J13, J18

Kidjie Ian Saguin; National University of Singapore

No Flat, No Child: House Price and Fertility in Singapore

The 'no flat, no child' belief prevalent among young Singaporeans exposes the link between house prices and fertility but little empirical evidence exists to prove this relationship. Apart from this belief, prediction of a negative relationship is strong supported by Easterlin's (1976) relative hypothesis and Becker's New Family Economics (1960). This prediction is confirmed using cointegration analysis applied to annual data at the aggregate level covering period from 1990-2016 in Singapore. The paper finds negative long-run effect: a unit increase in HDB resale index reduces gross reproduction rate by 0.0049, statistically significant at 10%. The variables include in the error correction model are sensitive to disequilibrium. But the speed of adjustment is slow: the estimated coefficient indicates that about 12% of this disequilibrium is corrected between 1 year. The paper provides policy recommendations on ensuring housing affordability considering the firm resolve of the government to improve fertility rates in Singapore.

Mun Heng Toh; National University of Singapore

Measuring & Benchmarking Productivity In Singapore F&B and Retail Sectors: Application Of 8 Ms Approach

The aim of this paper is to evaluate the limitations of conventional productivity measures like output per worker, value-added per man-hour and to suggest that a more comprehensive framework based on 8 Ms (Management, Make, Method, Money, Manpower, Materials, Message, and Market) be used to monitor and manage productivity efforts made in the enterprises. In the typical case of enterprise producing/selling multiple outputs and using multiple inputs, measuring and benchmarking productivity performance by the method of Data Envelopment Analysis (DEA) is ideal. DEA provides efficiency scores and enables weak companies to be identified and factors responsible for the unsatisfactory performance in such entities can also be enumerated and remedial measures be suggested. The framework and methodology is applied to about 260 enterprises from the F&B sector and Retail sector. In terms of DEA efficiency scores, restaurants outperformed the pubs, but they are behind the fast-food establishments and cafes.

Session 5.8

Chair: Ahmed Khalid

Shao Zhi Li; University of Macau, Chuantao Cui; Sichuan University, Daojue peng; Capital University of Economics and Finance

Globalization And Inequality: New Evidence From China's Regional Value Chains

Globalization strengthens both international and domestic value chains. For a large and spatially diverse country like China, many inland regions and non-tradable sectors are deeply involved in global production network without being direct exporters. We integrate China's regional input-output structure with international input-output tables, and document a set of new stylized facts. Using region-sector level value chain indicators, we report significant spatial variation and evolution in terms of intensity and positioning along the global value chain. Combined with detailed census data, we revisit the impact of trade integration on skill premium by distinguishing the various supply chain mechanisms. We find that global value chain participation significantly increases skill premium in the aggregate, but leads to contrasting effects through different channels: it raises inequality via the direct exporting channel while reduces it through the induced exporting channel. In parallel, foreign content of intermediate usage results in higher skill premium, while domestic content leads to lower skill premium. We discuss how these new findings can help understand the trends of within-region inequality and coastal-inland disparity in recent China.

Robert Rudolf; Korea University, Inmaculada Martínez-Zarzoso; Georg-August-Universität Göttingen

The Chinese Diaspora And Its Impact On China's Bilateral Trade

Using a new, extensive dataset on the population share of overseas Chinese in 1970 and 1990, this paper analyzes the impact of the Chinese diaspora on facilitating China's bilateral trade during the period 1984-2013. Using one-side gravity models, our findings suggest substantial trade-creation effects resulting from the presence of ethnic Chinese in the trade partner population. Diaspora impacts on imports were roughly twice as high as those found for exports.

Among export sectors, effects found were strongest for food, machinery & transport equipment, and chemicals. In regards to imports, the largest effects were found for food and raw materials. Our main findings are robust to a number of estimation techniques.

Giorgio Dominese; Transition Studies Research Network and Transition Academia Press, Venice

EU and China Crucial Roles in East, Central, South Asia, Middle East and Wider Eastern Europe

EU and China Crucial Roles in East, Central, South Asia, Great Eurasia, Middle East and Wider Eastern Europe by Giorgio Dominese Visiting Professor, Chair of Transition Studies Research Network Venice, Italy
Keywords: Europe and Asia rising roles; Contradictions of Populism and Nationalism; Economy, Finance and Trade questing long term Stability; Volatility and Thucydides Trap Risks; Multilateralism and Macro-regions future main Players
Abstract The New Silk Road is an “Oriental” inspiring contemporary “iconic” brand interpreting the more institutional One Belt, One Road Chinese ambitious program of utmost relevance and perspective for Central Asia, Caucasus, Black and Caspian Seas, Mediterranean bordering countries but the whole European Union and the Central-Eastern-Baltic region in particular, in the frame of a millenarian background of the relations between Europe and Asia. The paper tries to converge different approaches (history, conflicts, governance, innovation, revolutionary capabilities, environment, economics, finance, trade, new scientific discoveries, inclusive police and new theories of International Relations) into a basket of variables in some way measurable and understood in a rational, scientific approach.

Dodo Thampapillai; National University of Singapore

Environmental Macroeconomics – A Neglected Theme in Environmental Economics

Environmental issues are usually considered as ones that cause allocative distortions within the market. The corrections of such distortions, for example, by recourse to the internalization of externalities, are firmly rooted within the market framework. Therefore the traditional view is that environmental issues

fall fairly and squarely within the domain of microeconomics. This paper argues that such a view is flawed. The primary reason is that externalities are never fully internalized. Within any market, there always exist residual externalities, which over time do accumulate. Therefore, the same way as the aggregate of market transactions lead to the definition of national product in macroeconomics, the aggregate of residual externalities lend credence to the recognition of nature as capital and its depreciation. The paper illustrates the reformulation of frameworks in macroeconomics. These include Keynesian Income Determination, Aggregate Supply – Aggregate Demand (AS-AD) and Growth Models. The analysis of such reformulated frameworks illustrates different configurations for policy variables.

Session 6.1

Chair: Chia Wai Mun

Hiroshi Mukunoki; Gakushuin University

Does Trade Liberalization Promote Antidumping Protection? A Theoretical Analysis

Reducing trade costs by tariff reductions can be overturned if the tariff reductions induce governments to implement "contingent" protections, such as antidumping (AD) and safeguard measures. Some empirical papers have shown that a commitment to reduce tariffs leads to a more frequent use of contingent protections, while other papers have shown that such a substitution effect is rarely observed. This paper theoretically explores the conditions under which a lower import tariff promotes the import country's AD actions. The result shows that the relationship between tariff reductions and AD actions are not monotone, and there is a case where a lower tariff discourages AD actions.

Rashidi Said; Universiti Putra Malaysia, Normaz Wana Ismail; Universiti Putra Malaysia

Antidumping Measure And Its Impacts On Margins Of Trade

While reduction or elimination of tariffs and other restrictive trade barriers are keys to free trade agreements (FTAs) liberalization, the dumping and antidumping (AD) actions, however, are simultaneously growing at the rapid pace—from a total of 1,252 investigated cases in 1999 to 4,757 cases by end of 2014. The promoters of AD actions may relate these to unfair trade but others may find the widespread use of these as abusive. This paper uses the gravity model framework involving all the AD cases at HS six-digit level from the period of 1994-2014 imposed by fourteen country users against 48 trading partners in twelve Malaysian FTAs. Using the most detailed available UN COMTRADE import data at HS six-digit level, the paper empirically examines the impacts of affirmative AD actions of whether the measures influence extensive (new products) margin or intensive (existing products) margin of trade. This paper finds that AD actions reduced intensive margin by 2.5% a year following the imposition but only significantly shrank intensive margin by 6.3%

in the second year, and larger impact when intensive margin reduced by 7.7% in the immediate following year. The results also show that the WTO-plus obligations—a more stringent AD disciplines—in the FTAs have significantly improved both extensive and intensive margins, which suggests the usefulness of the AD provisions in ensuring FTA members taking AD actions prudently for larger trade gains.

Yan Zhou; Southeast University, Shumei Chen; Southeast University, Mei Chen; Southeast University

The Value-added Assessment Of A China-EU Free Trade Agreement: From The Chinese Perspectives

This paper studies possible rationales for a China-European Union Free Trade Area (China-EU FTA) driven by market, trade and value factors mainly from Chinese perspectives, with empirical evidence based on global value chain analyses. Stylized facts indicate that the potential to open markets to each other, to enhance bilateral trade in intermediate goods and upgrade value chain for both sides can be the logical sequel in a China-EU FTA from Chinese perspectives. Our empirical study provides the following interesting findings. In selected years, share of the domestic value added in final product exports embodied in exportation from China to the EU was much higher than that in intermediate exports for production of the direct importer's domestic final products. In addition, China's trade surplus with the EU was mainly contributed by the domestic value added in final product exports. In the same period, the proportion of value added in gross exports from Japan and South Korea to the EU was lower than that from China, revealing more complementarity, relevance, and dependence between China and the EU in general. Comparing results from the total value with value added manifests that China's trade surplus with and industrial competitiveness over EU member states have been overestimated and even distorted to some extent. In addition, Smiling curves of both German and French manufacturing industry are significantly longer than that of China, implying that changing the value chain pattern and upgrading the value chain can be the long-term driving force to promoting the construction of a China-EU FTA. Based on these findings, this paper puts forward some suggestions on when and how the FTA negotiations can be initiated mainly from Chinese perspectives.

Kalpna Tokas; Indian Institute of Management Bangalore (IIM Bangalore)

Preferential Trade Agreements : Evolving Trends & Implications For Value Added Trade

Past 25 years have witnessed an unprecedented proliferation in the number as well as scope of PTAs (Preferential Trade Agreements) across the world economy. This rise in the number of PTAs has been accompanied by increased diversity in their nature, and a growing number of developing countries entering into such arrangements. Over the years, the scope of PTAs has deepened, with the inclusion of chapters and provisions pertaining to areas like investment, sanitary and phytosanitary measures, competition, services, IPRs, government procurement, e-commerce and labour mobility, among other issues. These 'deeper' disciplines, traverse well beyond the traditional PTAs which only covered goods trade and aimed at lowering tariffs. Alongside the proliferation, is another phenomenon- the emergence of global production networks due to the fragmentation of production processes across geographies in order to exploit comparative advantage of different locations. As a result, countries have become more integrated and dependent. This paper aims to provide a broad overview of the evolving landscape of PTAs and trade flows: gross & value-added, over the years. It highlights the patterns of PTAs over time across various dimensions including the level of development of members including North-North, North-South and South-South PTAs; their regional composition; their scope in terms of coverage of issues such as services, investment, government procurement, etc. The discussion of the evolving nature of PTAs is juxtaposed with the evolving nature of trade flows among member and non-member countries, among developed and developing countries, within and across regions, and in different industries with varying characteristics.

Keywords : Trade Agreements, World Economy, Fragmentation, Economic Integration, North-South, Inter-regional Trade, Trade and Geography JEL Classification Codes : F01, F02,F12, F13, F15, R12

Session 6.2

Chair: Park Donghyun

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

Progressive Taxation As An Automatic Destabilizer Under Endogenous Growth

It has been shown that in an otherwise standard one-sector real business cycle model with an indeterminate steady state under laissez faire, sufficiently progressive income taxation may stabilize the economy against aggregate fluctuations caused by agents' animal spirits. We show that this previous finding can be overturned within an identical model which allows for sustained endogenous growth. Specifically, progressive taxation may operate like an automatic destabilizer that leads to equilibrium indeterminacy and sunspot-driven cyclical fluctuations in an endogenously growing macroeconomy. This instability result is obtained under two tractable progressive tax policy formulations that have been considered in the existing literature.

Vo Phuong Mai Le; Cardiff University

A Note On News About The Future: The Impact On DSGE Models And Their VAR Representation

In this paper we investigate the role of news shocks in aggregate fluctuations by comparing the empirical performance of models with and without the feature of the news shocks. We found a trivial difference between the two models. That is, the model with news shocks explains the variation as well as the alternative. The reason is that the news shocks can only advance the date at which agents know about the changes, but they do not change the stochastic structure of the model.

Eiji Okano; Nagoya City University, Kazuyuki Inagaki; Nagoya City University

Revisiting the Fiscal Theory of Sovereign Risk from a DSGE Viewpoint

In this paper, we revisit Uribe's [24] 'Fiscal Theory of Sovereign Risk' suggesting a trade-off between stabilizing inflation and suppressing default. We develop a class of dynamic stochastic general equilibrium models with nominal

rigidities and compare two de facto inflation stabilization policies; namely, optimal monetary policy and optimal monetary and fiscal policy with an interest rate spread-minimizing policy that completely suppresses default. Under the optimal monetary and fiscal policy, not only the nominal interest rate but also the tax rate works to minimize welfare costs through stabilizing inflation. Under the optimal monetary and the interest rate spread-minimizing policies, only the nominal interest rate is available as a policy instrument. Under the optimal monetary and fiscal policy, both inflation and the output gap completely stabilize, although these fluctuate under the optimal monetary policy. In addition, the volatility of the default rate under the optimal monetary and fiscal policy is considerably lower than under the optimal monetary policy. Thus, there is not necessarily a trade-off between stabilizing inflation and suppressing default. While the optimal monetary and fiscal policy stabilizes both inflation and default, the interest rate spread-minimizing policy makes the inflation rate volatile. However, inflation is not especially volatile when prices are sufficiently sticky. Thus, the trade-off between stabilizing inflation and suppressing default is then not as severe as that suggested by Uribe[24], even when there is a trade-off. In sum, our results are: 1) there is not necessarily a trade-off between stabilizing inflation and suppressing default, and 2) the trade-off between stabilizing inflation and suppressing default is not as severe as Uribe[24] suggests. As policy implications, we argue: 1) we can practically solve the trade-off between stabilizing inflation and suppressing default by adopting optimal monetary and fiscal policy, and 2) the interest rate spread-minimizing policy does not represent an inferior policy from the viewpoint of dissolving the trade-off between stabilizing inflation and suppressing default if price stickiness is sufficiently high.

**Sheue Li Ong; Tunku Abdul Rahman University College, Kiyotaka Sato;
Yokohama National University**

What Drives Asian Business Cycle Synchronization? Analysis Of Cross-country Spillover By The Dynamic Factor Model With Time-varying Parameters

Business cycle synchronization is one of the major preconditions for establishing an optimum currency area and tends to be investigated empirically in the literature of regional economic and monetary union. The dynamic factor model

(DFM) is often employed to examine whether co-movements of regional business cycles are mainly influenced by the regional factor. However, recent DFM studies are intrinsically static and, hence, fail to capture the changing nature of regional business cycles. In addition, even though finding a large influence of the regional factor, the DFM does not reveal what the source of the regional factor is in Asian integration. To overcome the static nature and the identification problem of the factor components, we employ the DFM with time-varying parameters to capture possible changes in business cycles among Asian countries. Moreover, we analyze which country, the United States or China, has a larger spillover effect on the regional factor in driving business cycle co-movements among Asian countries. The results of spillover effects in Asia are compared to the results in Europe. Our empirical findings will have significant implications for the transmission mechanism of regional or global shocks and also for establishing regional monetary arrangements in Asia.

Session 6.3

Chair: Songfa Zhong

Te Bao; Nanyang Technological University, Xu Tian; Nanjing Agricultural University, Xiaohua Yu; Georg-August-University Goettingen

Social Norm and Giving with Indivisibility of Money

We study a dictator game where the dictators first indicate their willingness to give in a decision form and then allocate 10 yuan cash to the receiver in an envelope. The cash consists of 10 banknotes of 1-yuan in Treatment 1 (high divisibility) and 2 banknotes of 5-yuan in Treatment 2 (low divisibility). Treatment 2 only has three choices of giving (0, 5, 10), and entails three extreme cases: selfishness, equality and generosity. The results show that (1) There is no significant difference between the willingness to give and actual giving in the both treatments; (2) A sizable share (30%) of individuals take ceilings or floors rather than the standard rounding in the low divisibility treatment. However, the individual round-up and round-down behavior mute the effect of each other at the aggregate level.

Phumsith Mahasuweerachai; Khon Kaen University

Behavioral insights and a new design to enhance new technology adoption among Thai farmers

In this study we used behavioral economics findings about role of losses when people make decisions, to design a program to overcome a major reason farmers are reluctant to make changes in crops that would substantially increase their incomes. The study is conducted in 38 villages in the Northeast region of Thailand. The original main crop in this study area is rice, which can be grown twice a year due to availability of irrigation system. However, rice does not make much profit and some year farmers actually lose. The Royal Initiative Discovery Foundation has tried to persuade farmers to grow new crops during dry season by supporting them inputs and importantly secured markets for the new crops. However, very few farmers join the program. And, the main barrier is loss aversion where the farmers see changing from rice to the new crops as unacceptable risky choice.

To overcome this, we design temporary risk transfer mechanism that could transfer possible loss from growing new crops from farmers to the foundation by given them monthly payment as income insurance to crop in their own field during dry season. After harvesting the crops, the revenue will go back to the foundation to cover costs including monthly income insurance. However, if loss occurs the foundation bears the loss. The total number of farmers applies to this program is 318, which is about six times higher than comparison group where there is no risk transfer mechanism offered. In addition, our study also found that limited resource signal would be able to spur farmers to make decision to join the program faster.

Kiet Nguyen; Can Tho University

Estimates of WTP and WTA Values of a Statistical Life in VietNam

The value of a statistical life (VSL) is widely used in benefit-cost and other policy analyses, and is estimated from people's stated tradeoffs of money for small changes in the risk of death. While the minimum sum people are willing to accept (WTA) for a change is the appropriate measure for an increase in this risk, the amount they are willing to pay (WTP) for a decrease in this risk, is in practice used for all changes -- based on the long-held assumption of standard economics that the two measures would provide essentially the same valuations. Given the large and growing recent empirical evidence showing large differences between WTA and WTP valuations of many entitlements and changes, the present study was among the first designed to test for possible differences between WTA and WTP estimates of VSL, for changes in both risks of cancer and transportation deaths. The results show that WTA based VSL estimates are about 5 to 6 times larger than WTP based VSL estimates, and further non-monetary scale value estimates (that avoid any influence of wealth constraints on peoples' valuations) are fully consistent with the observed disparity in the monetary evaluations. These results point to the likelihood of a serious bias in many current VSL estimates, and to the need to better determine instances in which the WTA is the more appropriate measure and those in which the more traditional WTP measure is the better choice.

Jack Knetsch; Simon Fraser University (Presented by Phumsith Mahasuweerachai)

WTP or WTA: Determining the Appropriate Welfare Measure When Preferences are Reference Dependent

When reference dependent, as many are, positive changes can be either gains, best valued by the WTP measure, or reduction of losses, which like losses are more accurately assessed with the WTA measure. Given the growing evidence of very large differences between the valuations of gains and losses, a heretofore lacking objective means to distinguish reductions of losses from gains, could reduce or eliminate a serious bias in current valuation practice. Methods to provide such assessments are presented here along with demonstrations of their efficacy – including valuations of changes in riverbank erosion control works in Thailand

Session 6.4

Chair: Minwook Kang

Chun-Yu Ho; University at Albany

Policy Distortion In Credit Market: Evidence From A Fiscal Stimulus Plan

This paper examines policy distortion in credit allocation across firms. Our empirical analysis is based on a unique proprietary 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 credit misallocation between state-owned enterprises (SOEs) and private-owned enterprises (POEs) in loan market. Our sample bank induces part of this credit misallocation by loosening credit risk management towards SOEs. As a result, there is a larger reduction in interest rate for SOEs than POEs after the policy announcement. We further show that the credit misallocation is absent when the bank provides funding through discounting bankers' acceptance - a shadow banking activity which faces less government intervention than lending does. Finally, we find SOEs have a lower return on capital (ROC) than POEs, which suggests that there is an adverse real effect of credit misallocation.

Ahmed Khalid; UBD School of Business and Economics

Endogenous Money And Bank Stock Returns Evidence From G-7 Countries Using Panel Data

Money supply impact on bank prices in major economies has been seldom tested within the context of post Keynesian endogenous money supply approach. Mixed evidence exists on whether under money endogeneity bank loan causes deposits, consequently banks create money supply. The other issue is, if money is endogenously created by banks, money should affect bank's earnings, which in turn must affect stock prices via likely changes to dividends and dividend growth: this paper also explores this link. Specifically, this paper reports new

findings on the post Keynesian (PK) assertion that money supply is endogenous meaning causality runs from bank lending to bank deposits. This paper reports on this issue for G-7 economies, most of which have yet been studied on this topic, using a large quarterly data set to test the (i) nature of money supply and (ii) its effect on bank stock prices. We apply the latest econometric procedures (panel VECM and GMM) and system of equations to address the research questions using panel data (from 1973-2007) for G7 economies. The sample periods are dictated by the availability of the data for the seven countries so that each country has a balanced sample. The sample periods are: Canada (1976:Q3-2007:Q1); France (1987:Q1-1998:Q2); Germany (1980:Q-1998:Q4); Italy (1982:Q4-1998:Q4); Japan (1973:Q3-2007:Q1); United Kingdom (1975:Q3-2006:Q2); and United States (1975:Q3-2007:Q1). The euro-region data end in 1998 with the start of the euro dollar currency in 1999. The results provide evidence that changes in money supply Granger cause bank stock price changes, thus money is endogenous. Our finding also reveals a significant correlation and causality between money supply changes and bank stock prices. Panel cointegration tests found evidence of cointegration. The long-run and short-run causality tests found money supply causes bank stock returns in the long run, not in the short-run. There is bidirectional causality between bank loans and money supply even in the presence of exogenous (predetermined) variables, thus money is credit money of banks. These findings corroborate related findings on money endogeneity. Robustness tests using GMM showed positive relation between money supply growth and bank stock returns and a negative relationship from bank stock returns to money supply changes since lower interest rates of money supply would affect stock returns negatively. It was also found that there is a bidirectional positive relationship between changes in bank loans and money supply changes. These results are in interesting, add value to the existing literature and could have important policy implications for monetary policy planning. Note: The paper is being revised with updated data. The paper to be presented will have new results.

Sook Rei Tan; Nanyang Technological University

Exchange Market Turbulence in Emerging Market Economies: The Role of Capital Flows

This paper aims to study the foreign exchange turbulence of a set of emerging market economies (EMEs) between 1995Q1 and 2015Q2 using the Exchange

Market Pressure (EMP) indices. The objective is twofold. First, as this study contributes to the existing EMP literature by accounting for both extreme positive and negative episodes, the identification of tail observations is carried out under the framework of Extreme Value Theory (EVT) to better handling asymmetric and heavy-tailed data. Second, the panel Multinomial Logit model is employed to explore whether the explanatory power of determinants would vary under different circumstances. Specifically, we examine the roles of different types of capital flows in determining the probability of exchange market turbulence relative to tranquility. Our study shows that there is asymmetry in the EMP distributions, where the occurrence of currency crises is more frequent than excessive appreciations in most EMEs. Overall, the portfolio and credit flows are significant determinants to both extreme events. By distinguishing residency of flows, the results show that devaluation pressure is mainly attributed to the foreign credit inflows.

Jae-Ho Yoon; Hanyang University

US Monetary Policy And The G7 House Business Cycle: FIML Markov Switching Approach

In order to determine the effect of US monetary policy to the common business cycle between housing price and GDP in the G7 countries (U.S., U.K., Canada, Germany, France, Italy, and Japan), this paper adopted FIML Markov-switching model of Yoon (2006). The paper showed a positive relationship between US interest rate and G7 GDP growth. US interest rate is a significant variable to the common business cycle between housing price and GDP in the G7 countries. However, US interest rate showed a significant effect to the G7 house business cycle for small shock periods, not extremely large shocks periods. This paper also found no relationship between US m2 growth and the GDP growth rate of the G7 countries. US m2 growth is not a significant variable to the common business cycle between housing price and GDP in the G7 countries.

Session 6.5

Chair: Weihong Huang

Zhifeng Wang; Nanyang Technological University

Reexamine the dynamic learning by exporting effect in China manufacturing sector

Export plays a key role in promoting China's economic growth during 1998-2007, according to Zhu (2012). Song et al. (2011) also emphasize the importance of exporting. The productivity of exporters in China, however, is unexceptional in Dai, Maitra and Yu (2016). Previous literature usually focuses on the comparison of the productivity of exporters with that of non-exporters. Our paper examines the dynamic learning by exporting effect. We find that the dynamic learning by exporting effect is significantly negative in most industries. After dropping the heavily export intensive (70%) firms, exporters have higher or equal productivity growth than non-exporters in more than half industries. There is a regional disparity in the learning by exporting effect which indicates that the relative market competition matters. The protection policy in the international trade also contributes to the lower productivity growth rate of exporters.

Zhikai Wang; Zhejiang University

Entrepreneurship, innovation and mixed ownership reform in China

Since the implementation of the policy of reform and opening to the outside world, the innovational spirit of private entrepreneurs has been stimulated in China, this is the main engine has been promoting the rapid economic growth in China for more than 30 years. With the entry of 2010s, the most dynamic private entrepreneurs innovation spirit is in decline, which directly affects the sustainable growth of China's economy. At present, there are many reasons for the attenuation or loss of Chinese entrepreneurship: macroeconomic cyclical downturn factors at home and abroad, the domestic tax burden and the pressure of financing cost and labor cost, the weakness of elements marketization, and the challenges of the new dual structure of state-owned economy and private economy, and so on. How to change the situation of entrepreneurship decline? The solutions are accelerating the process of market-oriented reform of China's elements market, employing corporate governance of state-owned enterprises and state-owned banks, promoting the pace of mixed ownership reform, and re-

stimulating innovation and entrepreneurship of Chinese entrepreneurs. This is the inevitable choice for China to take the road of development driven by innovation and achieve long-term sustainable economic and social development.

Lu Zhang; Sustainable Finance Lab

The case of the disappearing IPOs: Financial effects of Chinese import competition

Since the start of the millennium, the US has witnessed a dramatic drop in IPO activity. This paper documents the role Chinese import competition has played in suppressing IPO activity among US manufacturing firms. We show that US manufacturing firms have reacted to China's expansion in the period 1992-2007 by not going public, resulting in a significant drop in the number of IPOs and deal values. Our finding that a substantial part of the drop in US IPO activity can be attributed to the rise of Chinese import competition is robust to a wide range of alternative specifications. Further, we can rule out that this decline in IPO activity is the result of a substitution of debt for equity. Finally, we find that the performance of firms that have nevertheless gone public is worse in those industries that are faced with the most intense import competition from China. To our knowledge, we are the first to document the link between Chinese import competition and IPO activity and more generally the link between Chinese imports and firms' financial activities.

Zongxin Qian; Renmin University of China

Over-reaction And Stock Return Reversal In China

The paper analyses the profitability of strategies that buy past winner and sell loser portfolios following Jegadeesh and Titman (1993) method and explore the underlying reasons. We find that strategies of buying winner portfolios and selling loser portfolios with month horizon in China's A-share markets are not profitable. To further explain why momentum strategies with month horizon is not profitable, we measure the under-reaction and over-reaction phenomena using fix-effect model, random coefficient model and Campbell's (1991) return decomposition methodology. Empirical results provide evidence that there is an over-reaction in China's A-share markets and this is the reason why momentum strategies with month horizons is not profitable. The finding in the paper is

different from the finding of American stock market. We attribute the difference of two markets to the difference of the national financial market system, market legal system and investor groups.

Session 6.6

Chair: Taisen He

Jongsay Yong; University of Melbourne

Utilization of coronary angiography for acute myocardial infarction and stable ischaemic heart disease: Use, abuse or underuse?

Angiography is a diagnostic procedure using a special dye and x-rays to examine blood flows through the arteries. Current clinical guidelines recommend that all acute myocardial infarction (AMI) patients receive angiography prior to discharge. For stable ischaemic heart disease (sIHD), angiography is only recommended for patients with a high pre-test likelihood of obstructive coronary artery disease, and then only following positive non-invasive testing. Despite guideline recommendations, there are concerns of significant overuse of angiography for sIHD patients and under-use for AMI patients. This paper uses hospital administrative data from Victoria from 2000/01 to 2012/13 to identify and document, by hospital and over time, the extent of over- and under-use of angiography for respectively sIHD and AMI patients. The paper examines the variation in angiography rates for the two types of inappropriate care across hospitals and links the observed variation to institutional factors such as private hospital status and constraints on catheterization laboratory capacity. Preliminary computation using 2011/12 data shows that about 4,000 AMI patients were not given angiography but should have, while more than 4,500 stable IHD patients received angiography but should not have. There is an obvious mis-allocation of resources---lives could be saved while costs to the health system could be reduced if more AMI patients could receive angiography in place of sIHD patients.

Chantal Herberholz; Chulalongkorn University, Sonam Phuntsho; Ministry of Health, Royal Government of Bhutan

Social capital and healthcare utilization in Bhutan

This study examines the factors that explain healthcare utilization in Bhutan, focusing on social capital, given Bhutan's geography of remote and sparsely populated areas. According to the literature, the more isolated the living, the more important social capital may become. Standard factors proposed by the Andersen model of health care utilization are used as control variables. The data

come from the 2012 Bhutan Living Standards Survey, which contains a social capital module that covers structural, cognitive and output dimensions of social capital. The data are analyzed using logistic and multinomial regression models. The main finding from the logistic regression analysis is that individual social capital is positively related with healthcare utilization, especially in remote areas. The results from the multinomial regressions suggest that the number of close friends has a significant and negative impact on seeking care at secondary or tertiary care facilities, in remote and accessible areas. Moreover, it is important to note that economic status and place of residence are significantly associated with healthcare utilization.

Tomoki Fujii; Singapore Management University

Sources of health financing and health outcomes: A panel data analysis

We study the impact of various sources of health spending on health. We find that out-of-pocket private health spending and public health spending are on balance health-improving. However, such effects are not found for other private health spending, which includes private health insurance. For example, one percent increase in the consumption of out-of-pocket private health-care goods is associated with 0.36 years higher longevity. We also find that the impact of health spending is heterogeneous across income groups, gender, age groups, and different types of causes of deaths.

Tanetpong Choungprayoon; Fiscal Policy Office, Ministry of Finance

Potential Market Response to Sugar-Sweetened Beverages Taxation in Thailand: Evidences from Real Market Choice Experiments

Taxation in sugar-sweetened beverages (SSBs) has been proposed in Thailand in April 2016 for health promotion. It suggests imposing excise tax on ready-to-drink (RTD) SSBs at least 20 percent of the retail price and much higher on beverages containing relatively higher sugar level. Theoretically, taxation raises price resulting in consumption reduction. In reality, however, price does not always increase as tax levied. In Thai SSBs market, producers are able to maintain their retail prices using pricing strategies in order to remain competitive with a great number of local beverage vendors whose products are nontaxable.

This study examines current consumption behaviors and designs decision-making experiments simulating different circumstances in SSBs market with respect to responses to taxation. The result shows that Thai consumers regularly choose to drink SSBs due to its taste, its refreshingness and easy-to-find characteristics. Discrete choice experiments indicate that there is a possibility of consumption shift from taxed SSBs to untaxed SSBs despite the preference for taxed RTD SSBs. Logistic mixed model reveals that accessibility to SSBs, caloric sugar concentration, and product familiarity are important factors influencing purchasing decision. This also implies that specific tax with rates varied by level of sugar concentration is the most appropriate tax system encouraging producers to reduce the package size and the level of caloric sugar. Still, the government needs to implement non-tax measures to support healthier beverages and restrict high calorie beverages by intervention of distribution channel and availability of product simultaneously. This approach will definitely initiate healthier drinks production as well as encourage consumers to choose healthier beverages over unhealthy ones.

Session 6.7

Chair: Jong-Wha Lee

Yu-Li Wang; National Dong Hwa University

How Demographic Transition Affects Trade? A Gravity Study Of ASEAN Countries And Their Trading Partners

ASEAN countries and their trading partners have experienced different stages of demographic transition in the past half-century. This paper explores the impacts of changes in the population structure on trading behavior among the countries that trade with ASEAN members. Using the dependency ratio as a proxy indicating the demographic transition in 30 countries that we study in the gravity model, we find that an increase in the ratio of the old and young population in either the exporting or the importing countries has a significant negative impact on a country's exports. The magnitude of the impact varies across different decades. By separating the whole sample period into several equal sized sub-samples and distinguish the trading behaviors between ASEAN countries and their partners, we demonstrate the dynamic impacts of demographic transition on trade. A decrease in the dependency ratio of the partner countries has a more significant positive impact on ASEAN's exports to them before mid 1980s. This impact has become less and insignificant in the recent decades. On the other hand, the impact of a decrease in dependency ratio in ASEAN countries has an increasing stronger impact on their exports to their trading partners.

Dino Carlo Saplala; Ateneo de Manila University

The Relationship Between International Trade, Financial Development, And Economic Growth In The Philippines

The financial and trade sectors are two of the sectors which are said to contribute to economic growth according to literature. This study will explore the relationships between financial development, international trade, and economic growth in the Philippines for the period 1960-2014. It aims to examine if private credit and total trade increase real GDP. In addition, the study will examine if these three variables have a cointegrating or long-run relationship. The theoretical and empirical framework will be derived from Rahman, Shahbaz and

Farooq (2015), a similar study in the Australian context. Short run and long run relationships involving financial development, trade, and growth will be examined using the Autoregressive Distributed Lag (ARDL) bounds test of cointegration developed by Pesaran. This study will help guide policymakers in formulating trade policy and measures necessary to develop the financial system of the Philippines.

Tamali Chakraborty; Indian Institute of Technology Bombay, Haripriya Gundimeda; Indian Institute of Technology Bombay, Vinish Kathuria; Indian Institute of Technology Bombay

Reflection On Conflicts Revolving Around SEZs In India- Case Study Of SEZ Of Mundra, Gujarat

Special Economic Zones are special enclaves with free market orientation created to facilitate trade, promote economic growth as well as boost the local economy. As the establishment of SEZs has encountered local resistance, it becomes imperative to study whether there has been any meaningful impact of these zones on the local economy. The paper is an attempt to understand how the SEZs have benefitted the local economy using primary survey carried out on different stakeholders in the Mundra Region where Adani Port and Special Economic Zone (APSEZL) operates. Around 14 villages of Mundra in Kachch district has been mainly impacted by the SEZ. The study is based on the primary survey conducted among 218 samples households of the affected stakeholders—farmers, fisherfolk and cattle grazers during February to April 2015. The study is mainly based on the perceptions of these stakeholders. The study found that the fish catch had dramatically declined after the establishment of SEZ. The farmers were impacted due to the land acquisition by SEZ and the increased salinization due to the SEZ activities had resulted in decrease in the productions of the important crops - dates, sapota, coconut, cotton, sorghum (jowar) and pearl millet (bajra). The primary survey revealed that many cattle grazers have lost their livelihood due to increased cost of cattle rearing as the common grazing land of many villages have ceased due to land reallocation. The SEZs may have benefitted the country but the local economy as well the environment has to bear the brunt of the costs of SEZs. The SEZ policies need to ensure that the trickle down occurs more positively and at the same time the SEZs do not degrade the local environmental quality.

Session 6.8

Chair: Roland Cheo

Anpeng Li

Technical Progress And Allocative Efficiency

I develop a growth model with heterogenous firms to study the relationship between technical progress and allocative efficiency. The model economy learns new technology from the world frontier, and reallocates resources to fit the new technology. When firms start to catch up the frontier, they face the uncertainty of future productivity, and delay the adjustment of production factors as a response. Technological achievement narrows the gap to the frontier, reduces the future uncertainty of productivity, and then, improve the efficiency of resource reallocation. As a byproduct of technical progress, the allocative efficiency raises up along with the catch-up process.

Daishoku Kanehara; Kyoto University

R&D Cycle In A Fully-endogenous Growth Model With Population Growth

This paper presents that there exists a fully-endogenous R&D cycle in an R&D-growth model with exogenous labor growth and without knowledge externalities. Assuming two types of R&D: horizontal R&D (uses capital) and vertical R&D (uses labor), there is a period 2 cycle in which the economy faces with relatively high R&D expenditures and with relatively low R&D expenditures reciprocally. The source of this cyclical behavior is the market structures in intermediates sector. The long-run average per-capita growth rate in the cycle is not determined by the labor growth rate, but by vertical R&D intensity measured by the ratio of engineers over labor. In the period 2 cycle, the economy also faces with stable average growth rate beyond ages and stationary upward trend in R&D expenditures. In addition to the above characteristics, there exists an R&D promotion policy which can increase both long-run and short-run growth rate.

Sang-Ho Lee; Chonnam National University, Timur Muminov; Chonnam National University

R&D Versus Output Subsidies In A Mixed Duopoly With Partial Privatization

This study investigates R&D and output subsidies in a mixed duopoly, where public and private firms coexist and compete in both output and R&D investments. We compare the welfare consequences of subsidization and privatization policies, and show that the policy mix of R&D and output subsidies can achieve the first-best allocation, in which the degree of privatization does not influence output subsidies but influences R&D subsidies. However, under the second-best policy of output or R&D subsidies, an output subsidy is welfare-superior to an R&D subsidy policy, but the government has a higher incentive to privatize the public firm under the output than the R&D subsidy.

Special Sessions III

Aug 4 Fri 1200-1300

Special Session 3.1 Environmental

Chair: Ravi Kumar

Robert Stavins; Harvard University

What Can an Economist Possibly Have to Say about Climate Change (in the Age of Trump)?

Professor Stavins will begin by describing how the natural science of climate change leads to the economics of climate change and how that leads to the key geopolitical challenges presented by this global commons problem. He will describe why policy analysts around the world have focused on carbon pricing as a key policy instrument to address climate change, and will outline the basic consequences of carbon pricing. This will lead to a discussion of the international dimensions of climate change policy. Professor Stavins will describe the Paris Agreement and emphasize how it is a departure from twenty years of climate negotiations. Given that national policies are key, he will turn his attention to the types of policies that countries have put in place and may launch in the future. This raises the question of how the United States will proceed with the new Trump administration. First, Stavins will examine the path the administration has taken and is likely to take in the future with domestic climate policy, and then he will look at the Trump administration's approach in the international domain.

Bio:

Robert N. Stavins is the A. J. Meyer Professor of Energy & Economic Development, Harvard Kennedy School; Director, Harvard Environmental Economics Program; and Director, Harvard Project on Climate Agreements. He is a University Fellow, Resources for the Future; Research Associate, National Bureau of Economic Research; elected Fellow, Association of Environmental and Resource Economics; Member, Board of Directors, Resources for the Future; and Editor, Journal of Wine Economics. He was Chairman, Environmental Economics Advisory Board, U.S. Environmental Protection Agency. He was a Lead Author, Second and Third Assessment Reports,

Intergovernmental Panel on Climate Change; and Coordinating Lead Author, Fifth Assessment Report. His research has examined diverse areas of environmental economics and policy, and appeared in more than a hundred articles in academic journals and popular periodicals, plus a dozen books. He holds a B.A. in philosophy from Northwestern University, an M.S. in agricultural economics from Cornell, and a Ph.D. in economics from Harvard.

Parkash Chander; Jindal School of Government and Public Policy

Subgame-Perfect Cooperation in an Extensive Game

We propose a new solution concept for an extensive form game as an improvement over a subgame-perfect Nash equilibrium in the sense that every player is better-off in every subgame. From its definition and properties, the new concept is a cooperative analog of the non-cooperative subgame-perfect Nash equilibrium. We interpret the new solution concept also as a non-cooperative solution concept and, thus, the paper also contributes to the “Nash program” that treats the cooperative and non-cooperative approaches as mutually illuminative.

Bio:

Parkash Chander, Professor of Economics and Executive Director of Center for Environmental Economics and Climate Change at Jindal School of Government and Public Policy, is a Fellow of the Econometric Society, an Associate Editor of Journal of Public Economic Theory, a member of the Advisory Board of Journal of Economic Surveys, and a member of the International Advisory Board of Singapore Economic Review. He has previously held professorial positions at Indian Statistical Institute, Delhi and National University of Singapore (in reverse order). Also, he served as Head of Indian Statistical Institute, Delhi and as Head of Department of Economics, National University of Singapore.

After completing his PhD from Indian Statistical Institute, Chander was a post doc to Professor Leo Hurwicz. He has researched primarily in the areas of public economics, environmental economics, and game theory and applications. His publications include articles in *Econometrica*, *Review of Economic Studies*, *Journal of Economic Theory* and other leading journals in economics. Professor Chander has held visiting appointments at Johns Hopkins University, California Institute of Technology, University of Pennsylvania, Vanderbilt University,

CORE (Louvain-la-Neuve), the Autonomous University of Barcelona, International Monetary Fund, among other institutions.

Special Session 3.2 Econometrics

Chair: Qu Feng

Cheng Hsiao; University of Southern California

Incidental Parameters, Initial Conditions and Sample Size in Statistical Inference for Dynamic Panel Data Models

We use a quasi-likelihood function approach to clarify the role of initial values and the relative size of the cross-section dimensional N and the time series dimension T in the asymptotic distribution of dynamic panel data models with the presence of individual-specific effects. We show that the QMLE treating values as fixed constraints is asymptotically biased of order of cube-root of (N/T^3) as T goes to infinity for a time series model and asymptotically biased of order of cube-root of (N/T) for a model that also contains other covariates that are correlated with the individual-specific effects.

John Rust; University of Georgetown

Mostly Useless Econometrics? Assessing the Causal Effect of Econometric Theory

Economics is highly invested in sophisticated mathematics and *empirical methodologies*. Yet the payoff to these investments in terms of uncontroverted *empirical knowledge* is much less clear. I argue that leading economics journals err by imposing an unrealistic burden of proof on empirical work: there is an obsession with establishing *causal relationships* that must be proven beyond the shadow of a doubt. It is far easier to publish theoretical econometrics, an increasingly arid subject that meets the burden of mathematical proof. But the overabundance of econometric theory has not paid off in terms of empirical knowledge, and may paradoxically hinder empirical work by obligating empirical researchers to employ the latest methods that are often difficult to understand and use and fail to address the problems that researchers actually

confront. I argue that a change in the professional culture and incentives can help econometrics from losing its empirical relevance. Econometric theory needs to be more empirically motivated and problem-driven. Economics journals should lower the burden of proof for empirical work and raise the burden of proof for econometric theory. Specifically, there should be more room for descriptive empirical work in our journals. It should not be necessary to establish a causal mechanism or a non-parametrically identified structural model that provides an unambiguous explanation of empirical phenomena as a litmus test for publication. On the other hand, journals should increase the burden on econometric theory by requiring more of them to show how the new methods they propose are likely to be *used* and be *useful* for generating new empirical knowledge.

Bio:

John Rust is the Gallagher Family Professor of Economics at Georgetown University. He was previously a professor of economics at the University of Maryland from 2001 to 2012, at Yale University from 1996 to 2001, and a professor of economics at the University of Wisconsin from 1983 to 1995. Rust received his PhD from MIT in 1983, specializing in applied econometrics. He is best known for his research on the development of computationally tractable methods for empirically modeling dynamic decision making under uncertainty and making fundamental contributions to a very active area of current research on estimation of dynamic structural models in econometrics. He was awarded the Ragnar Frisch Medal by the Econometric Society in 1997 for his empirical application of the method in the paper, "Optimal Replacement of GMC Bus Engines: An Empirical Model of Harold Zurcher." Rust is a Fellow of the Econometric Society, and the cofounder of the firm Technoluddites, Inc. that provides academic software including Editorial Express, for online management of submissions to academic journals used by over 120 academic journals including the leading journals in economics such as *Econometrica*, and Conference Maker for online conference organization used to organize over 400 international conference including conferences sponsored by the leading international professional organization in economics, the Econometric Society, and Head Hunter for webbased academic recruiting used by over 70 leading academic institutions to improve their academic recruiting including MIT, Stanford, Maryland and Georgetown. Rust is also cofounder of the nonprofit charitable organization, EconJobMarket.org designed to facilitate the efficient operation of the job market for economists. This site has grown to be the largest

international web site for the posting of jobs and processing of online applications for academic jobs in economics.

Special Session 3.3 Behavioral

Chair: Jonathan Tan

Jasmina Arivofic; Simon Fraser University

Erik Snowberg; University of British Columbia

Econographics: The Foundations of Economic Behavior

Using a large-scale, multi-wave, representative incentivized survey of US residents we examine the connections between basic different economic behaviors. From ~20 measures, we recover ~5 underlying dimensions, suggesting new ways to theorize about the basic elements of economic behavior.

Bio:

Erik Snowberg is the Canadian Excellence Research Chair in Economics. He is based at the University of British Columbia. He completed his bachelors degrees in Physics and Math at MIT in 2002, and received his PhD from the Graduate School of Business at Stanford University in 2008. He was a Professor of Political Science and Economics at Caltech from 2008-16. He is the co-editor of the Journal of Public Economics and Journal of Economics and Management Strategy.

Special Session 3.4 Growth and Trade

Chair: Charles Yuji Horioka

Jesus Felipe; Asian Development Bank

The Debate About The Sources Of Growth in East Asia After A Quarter Of A Century: Much Ado About Nothing

This paper reviews what the profession has learned during the last 25 years about East Asia's growth using growth accounting exercises and estimations of production functions. The publication of Alwyn Young's (1992, 1994, 1995) and Jong-Il Kim and Lawrence Lau's (1994) studies, and Paul Krugman's (1994) popularization of the "zero total factor productivity growth" thesis, led to a very important debate within the profession. The paper demystifies this literature by pointing out a major methodological problem inherent in these approaches. This is that the variables used, namely, output, employment, the stock of capital, and the factor shares, are related definitionally through an accounting identity in value terms. As a consequence, results that are believed to reflect a true technological or production relationship are no more than the outcome of manipulating this identity. We show that total factor productivity calculated with value data is not a measure of productivity. We conclude that the debate about the sources of growth in East Asia was much ado about nothing.

Bio:

Jesus Felipe has been Advisor in the Asian Development Bank's Economic Research and Regional Cooperation Department since 2012. He has been with ADB since 1996, and he is the Managing Editor of the *Asian Development Review*.

He has also held academic positions with the Georgia Institute of Technology and the Hong Kong University of Science and Technology. He holds a Ph.D. from the University of Pennsylvania. His research interests spread across areas such as long-run growth in Asia, the dynamics of structural transformation, industrial policy, inclusive growth and full employment, the impact of technology on employment, productivity, technological progress, the functional distribution of income, business cycles, and the path of profit rates. He has published extensively in academic journals on different aspects of Asia's development, productivity and structural transformation; as well as books on labor markets, structural transformation, industrial policy and the foundations of the aggregate production function.

Mehmet Huseyin Bilgin; Istanbul University

The Determinants of Turkey's Exports to Islamic Countries: The Impact of Political Risks

Using a traditional gravity model, this paper aims to analyze the determinants of the Turkish exports to 43 Islamic Development Bank (IDB) member countries for the period from 1996 to 2015. We specifically investigate the effects of 12 political risk measures in the importing countries on the volume of exports. After implementing various robustness checks, the paper finds that the government instability in importing countries is negatively associated with the volume of exports.

Keywords: Political Risks; Gravity Model Estimation; South-South Trade; Export Market Diversification; Turkish Economy; Panel Data Estimation Techniques. JEL Classification Codes: F14; F50; C33

Bio:

Prof. Dr. Mehmet Huseyin Bilgin is a full professor of economics at Istanbul Medeniyet University in Istanbul, Turkey and the chair of the International Economic Integration Division. Prior to joining Istanbul Medeniyet University, he taught many courses at Kadir Has University for many years and also served as a part-time professor at Yeditepe University. He has also held several visiting faculty positions such as visiting professor and visiting researcher at Indiana University-Purdue University Indianapolis (IUPUI), USA; Jacksonville University, USA; Nanyang Technological University, Singapore, and Zagreb University, Croatia.

Professor Bilgin has many articles published in reputed international journals and research papers presented at international conferences as well as published academic books. He has been involved in administration of various national and international scholarly institutions and taken part in various boards of the academic journals such as Journal of International Financial Markets, Institutions & Money; Singapore Economic Review, and Eurasian Economic Review. He is the chair of EAFPEB (Euro-Asia Forum in Politics, Economics and Business) and founder of Istanbul Economic Research Association in which he currently serves as the Chairman. He is also the founder of EBES (Eurasia Business and Economics Society) and currently serves as the Vice President. He has also been active as a consultant in several institutions, a newspaper columnist, and guest experts in several national TV programs.

Special Session 3.5 Markets

Chair: Kong Yam Tan

Edward Lazear; Stanford University

Who Gets Hired? The Importance of Competition Among Applicants

Abstract: Being hired into a job depends not only on one's own skill but also on the skill of other applicants. The model featuring this point has many implications. First, bumping of applicants occurs when one job-seeker is denied a job or pushed to a lower paying slot by another applicant who is more skilled. Second, less able workers are more likely to be unemployed because high ability workers are more flexible in what they can do. Four different data sets are used to test these and many more implications. All are borne out. Most important, but lacking previous empirical verification, the probability of being hired depends on the quality of competing applicants.

Bio: Please refer to pp. 18-19.

Danny Quah; Lee Kuan Yew School of Public Policy

The American Century: Its Demand and Supply

In the interpretation of many observers, it was the stable, open, rules-based international order that, over the latter half of the 20th century, allowed so much of the world to trade and prosper, and thus to lift hundreds of millions out of poverty. That world order had at its unipolar centre American leadership - so that both the US and the rest of the world mutually benefited - to such a degree that many refer to that era as the American Century. Whether the American Century will continue is often discussed in terms of whether some competitor - Asia, China, Europe - will overtake the US as the world's dominant power. In this paper, I interpret that conventional International Relations analysis as one that focuses on just the supply side of world order. Such reasoning omits consideration of the demand for world order as a factor influencing the latter's dynamics. My analysis suggests instead that for understanding the historical

evolution of the international system and for predicting its future trajectory, it is essential to explicitly model both demand and supply.

Bio:

Danny Quah is Li Ka Shing Professor in Economics and Vice Dean (Academic Affairs) at the Lee Kuan Yew School of Public Policy, NUS. His current research takes an economic approach to world order, studying the supply and demand of world order: on the one hand, what international system the world's superpowers provide, and on the other, what world order the global community needs. Quah uses this to recast analysis of global power shifts, the rise of the east, regional order, and models of global power relations.

Quah is the author of "The Global Economy's Shifting Centre of Gravity". He gave the third LSE-NUS lecture in 2013, TEDx talks in 2016, 2014, and 2012, and the Inaugural LSE Big Questions Lecture in 2011. Quah was previously Assistant Professor of Economics at MIT, and then Professor of Economics and International Development, and Director of the Saw Swee Hock Southeast Asia Centre at LSE. He had also served as LSE's Head of Department for Economics, and Council Member on Malaysia's National Economic Advisory Council.

Session 7.1

Chair: Joseph Alba

Isha Gupta; CESP, Jawaharlal Nehru University

Macroeconomic Impact Of Foreign Remittances On Output Growth Of India: A Keynesian Perspective

Remittances by international migrants to their countries of origin constitute one of the largest sources of external finance for developing countries. India continues to be the largest recipient of remittances (in absolute terms) across the world. According to official figures, there has been a tremendous growth in private unrequited transfers to India in the post-liberalization period from just about Rs.12 billion in 1990-91 to about Rs.1009 billion in 2015-16. Given the large size of such unrequited flows, they should be expected to have significant macroeconomic effects in India. The paper emphasizes on this component of remittances that India has witnessed during the last many years. The paper focuses on the demand-side macroeconomic effects of the flow of private transfers on key variables such as consumption, investment, imports and income in India during the post-reform period of 1996-2014. In this regard, the study uses a Keynesian simultaneous, dynamic macro-econometric model to investigate the impact of these flows on the various macroeconomic variables of India in the given period. The paper also estimates the Marginal Propensity to Consume (MPC) and the Marginal Propensity to Import (MPM) in the short and the long run, the impact and dynamic multipliers of all the endogenous variables with respect to private transfers and consequently the induced effect of these transfers on these macroeconomic variables in India. JEL CLASSIFICATION: F220, F240, E120, C320 KEY WORDS: Remittances, Keynesian Dynamic Equilibrium, Simultaneous Equations Model, Macroeconometrics

Xiaotao Zhao; Southeast University

Can cognitive differences influence the nominal exchange rate?

In this article, we provide an exploration of the uncovered interest rates parity (UIP) puzzle, from the perspective of bounded rationality and personal preference in the real world. Different from past studies, in the theoretical part, we analyze the China foreign exchange market in the D-S framework, and then reach the conclusion that, under the perfect information condition, the exchange rate equilibrium is suitable for parity theory, while under the incomplete information and limited rational condition, the exchange rate is not only decided by parity theory but also decided by cognitive biases of market participants. In the empirical part, based on the 2014.2-2017.1 RMB/USD, RMB/EU, RMB/Yen data, we add the volume that includes cognitive biases information in the classic Frankel model and the newest Chen model to make them improved. Finally, we prove that cognitive biases could influence the nominal exchange rate.

Satoshi Koibuchi; Chuo University

Cross-border Merger And Currency Risk: Evidences From In-out M&As Of Japanese Firms

Since mid-1980s, many Japanese companies have expanded their production-distribution structure globally by establishing the foreign subsidiaries in the major countries and by purchasing local companies through the cross-border mergers and acquisitions (in-out M&As). This paper especially focus on the in-out M&As since cross-border merger could change geographical (and currency) distribution of sales, production, and assets of Japanese acquirers dramatically in short period. We interpret the in-out M&A as an event that potentially changes the geographical distribution of cash flows and assets for the firm. We conduct case studies through estimating currency risk exposures of Japanese firms that experienced large-scale in-out M&As during recent decades. We find three main observations. First, foreign sales ratio and foreign asset ratio substantially increased at the event of large-scale in-out M&A, which potentially contributes to increasing currency risk exposure of acquiring firms. Second, in some case, estimated currency exposure increased at timing of the in-out M&A. Third, the changes of currency exposure of acquiring firms seem to reflect the target firm's sales and asset structure by type of currency. These observations are consistent with the view that the large-scale in-out M&A could dramatically change the financial nature of Japanese firms.

Eiji Ogawa; Hitotsubashi University, Makoto Muto; Hitotsubashi University

Declining Japanese Yen And Inertia Of The Us Dollar

The U.S. dollar has maintained its position as the key currency in the global economy even after the euro was introduced to some states of the European Union (EU) in 1999. This is evidence of inertia of the U.S. dollar as the key currency. Our previous study (Ogawa and Muto (2016)) conducted empirical analysis to investigate the effects of several events on the inertia of the U.S. dollar. This paper focuses on the effects of the introduction of the euro and the global financial crisis on the contribution of the Japanese yen to utility. The introduction of the euro significantly decreased the contribution of the Japanese yen to utility as well as that of the Swiss franc. It explains the finding that the introduction of the euro increased the contribution of the euro to utility while the contribution of the U.S. dollar to utility was unchanged. The contribution of the Japanese yen to utility has significantly decreased while the global financial crisis occurred. The Japanese yen has a declining trend in terms of its contribution to utility both before and after the introduction of the euro and the global financial crisis.

Session 7.2

Chair: William S. Neilson

Chiu Yu Ko; National University of Singapore, Jens Leth Hougaard; University of Copenhagen, Xuyao Zhang; National University of Singapore

A Welfare Economic Interpretation of FRAND

Setting an industry-wide standard is crucial for information and communication technologies for interoperability, compatibility and efficiency. To minimize holdup problems, patent holders are often required to ex-ante commit to licensing their technologies under Fair, Reasonable and Non-Discriminatory (FRAND) terms. Yet, there is little consensus, in both courtrooms and industries, on the exact meaning of FRAND. We propose a welfare economic framework that enables a precise distinction: fairness in the distribution of royalty payments among patent users, and reasonableness in setting the size of the compensation to the patent holder, where both the size and the distribution of payments are determined in a non-discriminatory way making sure that similar firms are treated similarly. We illustrate our approach in various classic models from industrial organization, and discuss further potential applications.

Junichi Fujimoto; National Graduate Institute for Policy S, Junsang Lee; Sungkyunkwan University

Efficient Risk Sharing Under Limited Commitment And Search Frictions

This paper examines efficient risk sharing under limited commitment and search frictions. The model features a social planner and a continuum of risk-averse workers, where the planner is able to provide consumption only to workers matched with the planner and faces an aggregate resource constraint, while workers can walk away from the match in any period and search for a new match. The formation of new matches and the exogenous destruction of existing ones substantially expand the set of feasible stationary allocations, providing a role for the social welfare function. In the benchmark case of the Benthamite social welfare function, we find that the efficient stationary allocation exhibits novel consumption dynamics: Consumption begins at a relatively low level,

converges toward a certain level when the participation constraint is slack, and jumps up when it binds. We then explore the role of limited commitment in generating such rich consumption dynamics.

Mingzhi Li; Tsinghua University, Jaimie Lien; Chinese University of Hong Kong, Jie Zheng; Tsinghua University

First Mover Versus Cost Advantage: Network Effects In The Competition Between Proprietary And Open Source Platforms

We analyze the competition between a firm which sells a proprietary good or service to consumers, and a firm which supplies an identically valued good or service to consumers in an open source platform. The recent expansion of e-commerce to platforms in which an ever-expanding set of goods and services can be bought and sold by any participant at minimal cost to the firm (ex. AirBnB, Uber, etc.), exemplifies this type of competition. We model the proprietary seller as having a first mover advantage, and the open source provider as having a cost advantage in supplying a particular good or service. We examine a setting in which consumers have intrinsic valuations of the product, and additionally have network utility which depends on the number of other users (the “network effect”). The open source provider is shown to have a distinct advantage when the network effect is small. When the network effect is large, low valuation consumers tend to choose the open source provider while high valuation consumers choose the proprietary provider. We generalize the model to cases where the valuation of each type of product by an individual consumer may be correlated or uncorrelated, and the case where consumers may be myopic. We discuss the insights of the model with respect to industries which have experienced recent competition from open source platforms.

Pohan Fong; National Taiwan University

Egalitarian Policy-making in Legislative Bargaining

We develop and fully characterize a dynamic legislative bargaining model in which the policy chosen in one period will become the status quo in the next period, and moreover, only the players who voted against the currently enacted policy are eligible for making a new policy proposal. In such model, agenda setters are endogenously determined and could be evolving over time. This setup introduces new incentives for an agenda setter to propose a more egalitarian allocation of the benefits between himself and his supporters, i.e., those players who would vote to support the policy proposal. The intuition is simple: if some members in the winning coalition receive less benefits than the other members in the coalition, the outsiders could easily make a new policy proposal trying to buy votes from those coalition members who receive less. Such mechanism complements the insights from Baron and Ferejohn (1989 *American Political Science Review*) and Diermeier and Fong (2011 *Quarterly Journal of Economics*), and offers a new explanation for why the allocation of resources resulting from legislative bargaining is typically not as unequal as what is implied by theory.

Session 7.3

Chair: Yang Tang

Dainn Wie; National Graduate Institute for Policy S

Trade Liberalization and Demand for Female Workers: Evidence from Indonesia

In this paper, we investigate the impact of trade liberalization on demand for female workers using Indonesia's tariff reduction in 1990s as natural experiment. This paper utilizes both reduction in output tariff and intermediate tariff to examine the two different channels of trade liberalization on female employment: competition and technology. According to Becker, the reduction in output tariff will increase domestic competition and drive out discriminating firms and thereby increase demand for female workers. On the other hand, reduction in intermediate tariff will promote adoption of foreign technology and affect female employment by changing skill demand. We employ Indonesian manufacturing census data from 1993 to 1999 to separately examine the impact of trade liberalization on female employment in firm level. Our results show that the imported technology decrease demand for female workers while increased competition has limited positive impact.

Hanol Lee; Southwestern University of Finance and Economics

Output Cost Of Gender Discrimination In The Korean Labor Market

This study constructs and calibrates a macroeconomic model that explains Korea's glass ceiling and examines the output cost of gender discrimination. The model is based on the span-of-control framework in Lucas (1978). The model assumes that the source of the glass ceiling is that women are unable to accumulate as much managerial skill as men. According to the simulation results of a one-sector model, without the glass ceiling, the share of female managers increases, aggregate output increases by 7.2%, and the output gain by removing the glass ceiling is monotonic. However, the output gain by removing the glass ceiling in a two-sector model is non-monotonic because wages increase rapidly owing to high labor demand and the number of workers increase beyond at a

certain level, as per given parameters. The additional simulation results suggest that the effects of the policies in removing the glass ceiling on output will become monotonic if the government introduces policies to reallocate female employment from the service sector to the manufacturing sector.

Kazuyasu Sakamoto; Gunma University, Yoko Morita; Nagoya City University

Women's Career Decisions and Earnings Disparities Among Married Couples In Japan

This paper uses panel data from the Japanese Panel Survey of Consumers (The Institute for Research on Household Economics) to analyze the impact of women's career decisions on earnings disparities among married couples in Japan. In recent years, female employment rates have risen, and it has been pointed out that earnings disparities among married-couple households may be increasing. This paper examines the impact of women's career decisions (continuing to work, continuing not to work, or leaving or changing jobs after birth of first child) on earnings disparities among married couples. This analysis reveals the following points. First, from the 1990s through the 2010s, the Douglas-Arisawa Law grew weaker, with the impact of husbands' earnings on their wives' employment decreasing. Our findings confirm that even among women with high-earning husbands, the employment rate is rising, and wives' earnings are causing upward mobility, lifting these couples to higher earnings brackets (and widening earnings disparities). Second, women's continued employment after giving birth contributes to upward mobility in family earnings (leading to both increases and decreases in inequality) and inhibits retention in low earnings brackets.

John Ham; National University of Singapore, Saima Khan; National University of Singapore

Selection, Gender And The Impact Of Schooling Type In Urban Slums Of Dhaka

Bangladesh, a country of 160 million people, located in South Asia is rich in terms of its working population. According to the Bangladesh Bureau of Statistics (BBS), the youth (15 to 35 age group) and the economically active dominate the age pyramid, accounting for about 63% of the total population. According to the International Labour Organization (ILO), based on trends between 2006 and 2010, an average of 1.8 million people enter into the labour force every year. Thus, the key challenge for Bangladesh is to determine how to wisely harness this resource abundance.

Session 7.4

Chair: Chow Hwee Kwan

Changtai Li; Nanyang Technological University, Wai Mun Chia; Nanyang Technological University, Weihong Huang; Nanyang Technological University

Price Change, Trading Volume and Beliefs Co-evolve in Stock Market

The Famous Wall Street adage, “It takes volume to make prices move”, reflects the positive correlation between trading volume and absolute value of price change. In technical analysis, volume has serviced as an important confirmation signal of price action for practitioners. Although fluids of empirical researches has investigated the nonlinear causality relationship between price change and trading volume, few existing theoretical literatures could reproduce this relationship and give persuasive explanations to this phenomenon. This paper provides both empirical and theoretical evidence for price-volume relationship. By investigating US stock market data, we detect many stylized facts on trading volume. Using a heterogeneous agent model with evolutionary switch mechanism, we find that i) our model successfully simulate the seemingly chaotic fluctuations of financial market, which is high compatible with the real market both in term of price and volume. ii) The co-evolution of prices, volume and beliefs is found in our simulation. iii) Our model can explain the formation of different chart patterns and crises, which provide theoretical support for technical analysis.

Qiao Huang; Nanyang Technological University, Weihong Huang; Nanyang Technological University

How Agent-based Modeling of our Brain Capture Decision Making in Bank Runs

Generally, panic-based banks runs are possibly predicted by economist in a coordination game (Diamond and Dybvig 1983). However, the probability of bank runs is neglected by the classical model, although it is crucial for all the investors, bankers and policy makers to know, especially when facing chaos. This paper simulates the nonlinear dynamic probabilities of bank runs based on

the global games approach, which mentions that heterogenous agents hold highly correlated but unidentical beliefs about the true payoffs. An internal “mental model” that agents have integrated cognitive-affective network is proposed. At the result of simulation, agents will be easily approach to “run” or “no run” outcome in low level of uncertainty. However, in high level of uncertainty, the pessimistic announcements play significant role in decision making. In the “run” outcome, the changes of early payoff for the immediate withdrawal become useless. The solution is to let the fundamental economics recover by decreasing the uncertainty or increasing the final payoffs. The threshold of agents making decision is figured out, and this model is robust for different number of agents. This paper is a pioneer of linking agent-based computational economics and behavioral economics.

Matthew Greenwood-Nimmo; University of Melbourne, Jingong Huang; University of Melbourne, Viet Nguyen; University of Melbourne

Financial Sector Bailouts, Sovereign Bailouts And The Transfer Of Credit Risk

We develop a sophisticated empirical network model which reveals a cycle in the net credit risk spillover from financial institutions to sovereigns. Initially a net source of credit risk, the financial sector becomes a net recipient after the 2008 financial sector bailouts in many countries. Fiscal fundamentals explain much of the heterogeneity in the amplitude and duration of this cycle. The subsequent European sovereign bailouts disrupt the feedback between sovereign risk and local financial sector risk. Depending on the initial fiscal position of the target country, sovereign bailouts may also disrupt international credit risk spillovers originating from the target sovereign.

Xinyi Deng; Southwestern University of Finance and Economics, Yu Zhang; Southwestern University of Finance and Economics

The Relationship Between Housing Bubbles And stock Bubbles: Alternating Or Co-existing?

Consumption and investment are two major motives of housing demands. And the investment motive bears the primary responsibility when housing bubbles are investigated. As an investment vehicle, investment housing is similar to stocks. However, bubbles in housing and stock markets show complicated relations. On the one hand, housing bubbles and stock bubbles may appear alternately, as investment properties and stocks are substitutes to some extent. On the other hand, housing and stock markets are affected by real economy, so bubbles may show up simultaneously in both markets. This paper employs VAR (2) models to investigate the relationship between the two bubbles using quarterly data from China, Singapore, America, Australia, and Spain. Logarithmic return rates are used as surrogates of bubbles. Granger causality tests and orthogonal impulse response functions are generated based on the VAR models. The results suggest that relationships between housing bubbles and stock bubbles differ across countries: in China there is a negative relationship, while the relationships in Australia and Singapore are positive, suggesting co-existing bubbles. The before-crisis and after-crisis relationships are studied separately in U.S. (the 2008 financial crisis) and Spain (the European debt crisis). The 2008 financial crisis did not change the positive nature of the relationship in U.S., while the relationship in Spain changed from positive to negative. The variation of signs in relationships between the two bubbles across countries and time can be explained by the balance of substitution effect (alternating bubbles) and simultaneous influence of real economy (co-existing bubbles). The negative relationship in China is attributable to limited kinds of investment vehicles comparing with developed countries so that the substitution effect dominates. The sustained economic downturn after the European debt crisis explains the change of sign in Spain.

Session 7.5

Chair: Joanna Poyago-Theotoky

Ying-Yi Tsai; National University of Kaohsiung

Innovation for Green Technology

The main research question we address in this paper is as follows: what are the consequences of an inflow of foreign direct investment (FDI) for domestic emission standards, industrial policy and welfare? It is generally believed that lower emission standards serve as the cause of FDI inflow (cf. Low and Yeats, 1992; Panagariya, 2006). This pollution heaven hypothesis builds the argument upon empirical evidences and show that many polluting industries migrated to countries with less strict environmental restriction in the 1970s and 1980s, and that the stronger regulation of pollution in the OECD countries led to significant displacement of polluting activities from those countries. This paper extends a recent work of Lahiri and Tsai (2017) that investigates whether or not FDI cause lower emission standards in an international oligopolistic market for non-tradeable commodity. For a given inflow of FDI, a recipient country weighs the benefits and costs of environmental regulations and, therefore, the level of optimal tax/subsidy policies. In light of the call for green innovation, we emphasize the discovery of greener abatement technology for production. The focus is the extent to which such green innovation being developed by the polluters can affect the causality between FDI and emission standards. In an international oligopolistic setting, we study a strategic model of R&D in which a polluter can exert R&D effort in improving the extant technologies for greener environment, given that its rivals may fail in conducting such green investment. We shall show that the intensity of competition that is channeled through R&D effort for green investment directs the welfare implications.

Jorge Pereira; University of Queensland

The Porter Hypothesis: Conditions for social and private gains from an emissions tax under imperfect competition

An environmental policy such as an emissions tax, which can be viewed as socially desirable, usually has a negative impact on firms' profitability. This paper investigates the conditions under which the design of an emissions tax can align social and private interests. Our contribution is to determine the general conditions for firms' profits and social welfare to be higher under the implementation of an emissions tax than under no policy. This allows us to investigate the Porter Hypothesis; Michael Porter (1991) argued that well-designed regulation may enhance businesses' profits in a non-optimising world of imperfect information and organisational or market failures. Firms' profits and social welfare are analysed under a homogeneous product, n-symmetric firms oligopoly, where production entails the generation of environmentally damaging emissions, which are taxed. Firms can reduce emissions by investing in emissions abatement R&D or by decreasing their output (or both). Each firm decides on the R&D investment, which deterministically results in a level of emissions abatement. This investment has the sole purpose of reducing emissions. The firm then chooses a supply schedule, specifying how much it will produce at various prices. This approach allows us to parameterise the intensity of competition, which varies continuously from Cournot to Bertrand strategic behaviour. We consider a two-stage game where firms first choose their investment in environmental R&D and, based on this strategic choice, they compete in supply schedules in the market place.

**Santiago Rubio; University of Valencia, Guiomar Martin-Herran;
Universidad de Valladolid**

On Second-best Taxation For A Monopoly With A Stock Pollutant

This paper evaluates the effects of the lack of regulatory commitment on emission tax applied by the regulator, abatement effort made by the monopoly and social welfare comparing two alternative policy games. The first game assumes that the regulator commits to an ex-ante level of the emission tax. In the second one, in a first stage the regulator and the monopolist simultaneously choose the emission tax and abatement respectively, and in a second stage the monopolist selects the output level. We find that the lack of commitment leads to lower taxation and abatement that yield larger emissions and, consequently, a larger steady-state pollution stock. Moreover, the increase of environmental

damages because of the increase in the pollution stock more than compensates the increase in consumer surplus and the decrease in abatement costs resulting in a reduction of social welfare. Thus, our analysis indicates that the lack of commitment has a negative impact on welfare although this detrimental effect decreases with abatement costs.

Joanna Poyago-Theotoky; Latrobe

Managerial Delegation Contracts in a Cournot Duopoly with Pollution

We introduce an explicit environmental incentive into a managerial compensation contract under an emissions tax regime in the context of a Cournot duopoly with pollution externalities. We show that, depending on the effectiveness of “green” R&D, compared to a standard sales compensation contract, a manager conducts more abatement. As a consequence, the regulator sets a lower emissions tax, and social welfare is higher. Moreover, in general, firm owners earn higher profits when using the environmental delegation contract.

Session 7.6

Chair: Jesus Felipe

Hiroshi Fujiki; Chuo University, Migiwa Tanaka; Charles River Associates

How Do We Pay Under Evolving Retail Payment Technology? Evidence From Japan

We examine the determinants of the choice of payment instruments for day-to-day transactions with values between 10,000 and 50,000 yen, and whether households which exclusively use cash (cash users) hold more cash than households using either credit cards alone or both credit cards and cash (card users), using Japanese household data. We obtain three results. First, card users generally have higher incomes, larger debt payments, better financial knowledge, and younger household heads and live in more populated areas than cash users. Second, holding household characteristics constant, card users have lower cash holdings than cash users in our single-person household data set. Finally, if all Japanese households place an emphasis on lower service fees when selecting a financial institution, our simulations show that cash users will decrease and the aggregate demand for cash will fall.

Subodh Pandit; Keshav Mahavidyalaya, University of Delhi

The Ripple Effect Of Indian Consumption Behaviour

The behaviour of consumers across consumption classes shows a pattern. This is a combination of averseness to following the behaviour of those who lay below in the consumption hierarchy and an inclination to imitate those above. These opposing poles create a “Consumer Potential” phenomenon for those at the middle. As successive classes respond to this potential, it leads to a ripple pattern which is in the form of a saw tooth wave. This could also be concluded as unconsciously cohesive consumer behaviour for consumption growth propagation. The wave like pattern can help predict business cycles and consequently frame effective fiscal and monetary policies. The fresh uptrend in the Indian consumption growth cycle is expected to begin in 2018. The ripple pattern observed for consumers within an economy can also be demonstrated to operate across “peer group” countries.

Lay Lian Chuah; The World Bank

Resource Misallocation And Productivity Gaps In Malaysia

Resource misallocation is often related to distortions which can lower aggregate total factor productivity (TFP) in the economy. We find evidence of distortionary forces diverting resources away from the productive to less productive firms in Malaysia. Using firm level data, we measure the country's hypothetical productivity gains of moving towards the US level of allocative efficiency to be 23% in 2014. Across the years 2005 to 2014, the productivity gap between firms in Malaysia and the United States (U.S.) remained the same, suggesting that the "catch-up" process has somewhat taken a pause. The industry analysis shows that misallocation to be rather significant in the food and beverage and wood and wood products industries, while less so in the machinery, electrical, electronics and computers industries. The hypothetical productivity gains if realised could potentially raise overall Gross Domestic Product (GDP) growth above the 5-6% band.

Alexander Blair; Macquarie University, Andrea Chareunsy; Macquarie University

A games network explanation of Chinese-style firm networking in Taiwan and Hong Kong

Rapid economic growth in the People's Republic of China, and in countries of the Chinese Diaspora, has been attributed to guanxi or Chinese style firm networking. In an earlier paper, we used games network analysis to posit an alternative explanation, based on profit and utility maximising incentives, to the Confucian (cultural) explanations of guanxi networking that are found in the current literature. In our approach, we follow standard economic principles of utility maximisation, but subject to the constraint of high transaction costs and untrammelled administrative fiat. In our games network analysis we develop agents with utility maximising incentives (including profit, market power, and firm survival) and model the behaviours arising from those incentives which lead to the formation of this particular Chinese network structure. We find that, firm networking patterns are similar to standard guanxi if and only if there is a presence of strong administrative fiat impacting on firm profitability and

survival. Where firms are not vulnerable to unrestrained bureaucratic fiat, guanxi style networking is absent, contrary to cultural explanations which sees such behaviour as inevitable given the society's Confucian origins. Guanxi networking is present in local firms in Taiwan only where extra-marketplace official fiat can significantly impact on their profitability, or where there is significant commercial contact with the Mainland. The model developed may make a significant contribution to understanding of firm networking behaviour previously deemed to be cultural in origin.

Session 7.7

Chair: Jasmina Arivofic

Ryungha Oh; Seoul National University, Sokbae Lee; Columbia University, Jihong Lee; Seoul National University

Knowledge Spillovers And Patent Citations:trends In Geographic Localization. 1976-2015

This paper examines the trends in geographic localization of knowledge spillovers via patent citations, considering utility patents granted by the US Patent and Trademark Office during the period of 1976-2015. Our analysis adopts the matched-sample framework pioneered by Jaffe, Trajtenberg and Henderson (1993). Despite the accelerating globalization and widespread perception of the "death of distance," a multi-cohort study reveals significant and growing localization effects of knowledge spillovers at both intra- and international levels after 1980s even when the control patents are generated using disaggregate levels of technology subclass a la Thompson and Fox-Kean (2005). We also compare the localization effects across states and industries.

Kizuku Takao; Aomori Public University, Takaaki Morimoto; Osaka university

Fiscal Policy And Transitional Dynamics In A Schumpeterian Model With Step-by-step Innovation

We examine the short-run and long-run effects of fiscal policies in an endogenous growth model with "step-by-step" innovation. Specifically, along the lines of Aghion, Harris, and Vickers (1997), Aghion, Harris, Howitt, and Vickers (2001), Mukoyama (2003), and Aghion, Bloom, Blundell, Griffith, and Howitt (2005), we consider the model economy where there are a unit continuum of industries and, in each industry, only firms producing the state-of-the-art products can engage in the next-round innovations. And then follower firms need to catch up with leader firms before engaging in the next-round innovations. Each industry is separated by the unleveled industry where only one leader operates or the leveled industry where the two neck-neck firms compete on the product market and R&D races for the next winner. The growth rate of

the economy is dependent on not only the intensity of quality-improving R&D but also that of catch-up R&D. The two-dimensional investment opportunities make the equilibrium dynamics to be quite complicated, compared with the standard quality-ladder model [e.g. Grossman and Helpman (1991)]. We show the following results: (1) In the steady-state equilibrium, the corporate tax cuts unambiguously enhance economic growth. On the other hand, the growth effects of the subsidy for quality-improving R&D and catch-up R&D depend on the proportion of the leveled industry. (2) The equilibrium path toward the steady state is locally determinate or indeterminate sink. In the latter case, the equilibrium path toward the steady state may display damped oscillation. In wide ranges of parameter spaces, such an endogenous cyclical fluctuation occurs. This suggests that even if a fiscal policy is effective for economic growth and social welfare from a long-term perspective, it leads to macroeconomic instabilities and for some situations it triggers short-run slowdowns in economic growth.

Philipp Plugmann; University of Applied Sciences Karlsruhe

The Willingness Of European And Asian Exchange Students To Found An Innovative Technology Company And The Economic Consequences For The Future

The international competition of economies depends on the innovation performance creating new products and services and the willingness of individuals to be an entrepreneur. We asked in the years 2011 - 2016 2 groups of exchange students at the University of Applied Sciences Karlsruhe who study for a degree in applied informatics or engineership science. The first group (n = 224) were exchange students from Europe (Spain, France, Luxembourg, Italy, Belgium, Poland, Portugal, Denmark), the second group (n= 183) were students from Asia (China, India, Malaysia, Thailand, Vietnam). The results were that the willingness to found an own company with an innovative topic was in group 1 28.13 % (n= 63) and in group 2 78.14 % (n=143). The willingness to open a company additional to a part-time or full-time job was in group 1 18.30 % (n=41) and in group 2 56.28% (n=103). Finally the importance of a work-life-balance was relevant in group 1 for 91.96% (n = 206) and in group 2 for 16.39% (n= 30). The significance, calculated with IBM SPSS 24, was $p < 0.05$. It seems that the Asian exchange students have a higher psychological resilience and a more positive social perspective on work and working hours than the asked European exchange students. Our conclusion is that there'll be a shift in the

number of innovative technology start-up's in the future towards asia and an asian domination in this segment.

Kritsada Patluang; University Thai Chamber of Commerce

Social Capital Multiplicity For Hidden Innovation In Rural Tourism: Policy Implication For Broadening Non-technological Innovation

This paper is to contribute to the emerging literature on three branches of innovations: hidden, rural and tourism innovations. Its theoretical and empirical underpinnings centre on the combinations of social capital for generating the innovations. Based on interview and questionnaire data from a survey of 134 rural tourism community enterprises across Thailand, findings cover three hidden innovations--marketing, organisational and supporting process innovations--and their important role in helping the enterprises to commercial new goods and services and sustain their competitive positions in dynamic branches of tourism. The paper employs factor and regression analyses to investigate the effects of multiplicities of social capital on these non-science-based, hidden innovations of the enterprises. On top of certain knowledge bases, the "inherent social capital", encompassing levels of collaboration among members and of utilisation of business and information networks, breeds marketing and supporting process innovations. The "nationally supporting social capital", embracing degrees of research network utilisation and of acquaintance/participation with national development agencies, spawns all types of the innovations. The primary policy implication derived is that matched categories of social capital are required for augmenting specific types of hidden innovation. This is an added but crucial approach to develop and broaden innovation landscape within a country. Also as a contribution to the literature, the results endorse extending OECD/Eurostat's OSLO Manual used here for measuring hidden innovation in other traditional and services sectors. Finally, the findings are expected to be applicable to other cases of innovation development policy targeting other networked enterprises in other countries.

Session 7.8

Chair: Mun Heng Toh

**Wasawat Khamchanthuek; Khon Kaen University, Voravee Saengavut;
Khon Kaen University, Siraprapa Bumrungrkit; Khon Kaen University**

Hedonic Pricing Method In Determining Flood Prone Agricultural Land Prices: A Case Study In Khon Kaen, Thailand

This paper examines the impact of flooding on land prices in Khon Kaen, Thailand, where agricultural areas have always been subject to flood risk. The Hedonic Pricing model was applied using socio-demographic data and land appraisal from the Treasury Department. The in-depth interviews were conducted to elicit individuals landowner's flood damage including depth level, flood duration and risk perception associated the most recent event. Furthermore, a geographic information system (GIS) was utilized to provide physical characteristics of the data such as distance from land property to the nearest main road, community center, and stream or creek. The impact of flooding on land prices was estimated using the simple ordinary least squares (OLS) method and spatial regressions. The results identify land-use characteristics, productivity characteristics, and specific location of agricultural land as the significant factors affecting land values. While land-use characteristics and physical attributes have a positive influence on land prices, flood characteristics exhibit adverse effects.

Kimlong Chheng; ANU, Budy Resosudarmo; ANU

Land Property Rights And Household Food Security Among Rice Farmers In Rural Cambodia

Land property rights in Cambodia remain weak and fragile. For instance, about between 70-80 percent of agricultural land in Cambodia have not received legal titles as a form of land rights security. At the same time, between 25-28 percent of rural households in Cambodia face food insecurity for about two to three months every year. Because quantitative evidence is lacking in empirical literature, this study aims to fill the gap and to provide some useful evidence from a post-conflict and an understudied developing country. We examine the empirical link between land property rights and food security, using primary data from a household survey we conducted in 2014 among rice-growing households in 32 rural villages in Cambodia. The main estimation results show that an improvement in land property rights is associated with a reduction in intensity of household food insecurity by about 0.4 weeks or roughly 3 days per year, on

average. The estimation results also indicate that strengthening land property rights has the potential to improve farmers' access to rural credit, land-based collateral usage and farmers' rice revenue-cost ratio, known also as 'input efficiency'. Lastly, a wider usage of titled agricultural land as collateral to obtain a loan and enhanced rice revenue-cost ratio through the strengthening of agricultural land property rights can be an option for reducing rural food security in Cambodia.

Jingjing Cai; Xiamen University, Hang Xiong; ETH Zurich

Agent-based Simulation Of Cooperation Diffusion In The Irrigation Self-governance

This study presents an agent-based simulation of the formation of cooperation in using irrigation. The simulation model is developed based on our understanding of the underlying mechanisms by which farmer households participate the cooperation. That is, a household first become a potential participate when the cost of cooperation it needs to sustain is not higher than the amount it can afford or is willing to pay; and on top of this, the propensity that the household participates is heavily affected by its personal characteristics and neighborhood effects. We use model to examine the impacts of initial participants and government support on both the reach and velocity of the cooperation diffusion. The model is calibrated to villages with successfully running Water User Association (WUA) in central China. Our results show that government support plays a critical role but the initial participants do not matter much for different types of initial participants and network structure of the village.

Session 8.1

Chair: John Rust

**María del Carmen Ramos-Herrera; Universidad Complutense de Madrid,
Simon Sosvilla-Rivero; Universidad Complutense de Madrid**

**Inflation, Real Economic Growth And Unemployment Expectations: An
Empirical Analysis Based On The Ecb Survey Of Professional Forecasters**

Expectations are at the centre of modern macroeconomic theory and policymakers. In this paper, we examine the predictive ability and the consistency properties of macroeconomic expectations using data of the European Central Bank (ECB) Survey of Professional Forecasters (SPF).

**John Reade; University of Reading, Michael Clements; University of
Reading**

**Forecasting and Forecast Narratives: The Bank of England Inflation
Reports**

We analyze the narratives that accompany the numerical forecasts in the Bank of England's Quarterly Inflation Reports. We focus on whether the narratives contain useful information about the future course of key macro variables over and above the point predictions, in terms of whether the narratives can be used to enhance the accuracy of the numerical forecasts. We also consider whether the narratives are able to predict future changes in the numerical forecasts. We find that sentiment related to specific aspects of the economic outlook (say, demand conditions, or supply conditions) can enhance point forecast performance, and changes in sentiment (expressed in the narratives) can predict subsequent changes in the point forecasts.

Daniel Lewis; Chulalongkorn University

**Big Data Time Series For Analysis Of Economic Policies Using Social
Economic Surveys**

This paper explains how to turn Social Economic Surveys into monthly time series allowing for the analysis of economic policies over time. It is possible to show the effect of policies on different income deciles, different education levels, or other divisions on a monthly basis. The immediate effects of policies can be tracked for each income decile over time from the inception of the policy, through changes in the rules of the policy, and until the policy ends. The technique strings together annual Social Economic Surveys that include a monthly sample marker, compressing data into average and share levels. Suitable smoothing is applied. The technique could be broadly applicable to many other countries that collect similar social economic data. The technique can be used to track whether subsidies are reaching the target group, which segments of the public respond to stimulus measures, and other more business related questions such as market segmentation for products. The author also proposes a statistic to measure the extent to which particular policies are pro-poor. Data used for examples include approximately 20 million data points from the Thai Social Economic Survey 2007-2015.

Lunan Jiang; Henan University

Dividend Taxes, Household Heterogeneity and the U.S. Great Depression

As shown by McGrattan (2012), an anticipated increase in dividend taxes plays an important role in explaining the dramatic investment decline during the U.S. Great Depression. This paper attempts to investigate whether this is still robust to a model with household heterogeneity and precautionary saving motives. I build an Aiyagari model with dynamic firms, dividend taxes, and labor productivity shocks, which are calibrated to account for the U.S. earnings and wealth Inequality during the Great Depression using 1930s data. The conclusion is that the impact of anticipated increases in dividend taxes is very sensitive to the presence of household heterogeneity. The quantitative results show that, in the presence of household heterogeneity, the predicted investment is 50% smaller than in the standard business cycle model proposed by McGrattan (2012). The decline in output and working hours also become much less significant. Intuitively, although the anticipated hike in dividend taxes diminishes the expected return to the investment, it also shrinks the total assets that households use for self-insurance against the highly persistent idiosyncratic shocks. In order to retain the desired asset level, precautionary households keep their savings at a lower capital return and the model ultimately generates a lower aggregate investment decline.

Session 8.2

Chair: Partha Sen

Yuto Kajita; Waseda University, Kozo Ueda; Waseda University

QE Effects On Prices Through A Fiscal Channel

This paper quantifies the effect of the interest on excess reserves on prices through fiscal deficit. I examine a possible scenario in an exit from Japan's Quantitative Qualitative Easing. As the exit, I focus on raising the interest on excess reserves and ceasing to purchase JGBs. With huge excess reserves, paying the interest on excess reserves will lead to the inevitable loss for the Bank of Japan. Following Fujiki and Tomura (2015) and improving the methodology of their calculation of the amortization of JGBs by estimating the market value of each JGB held by the Bank of Japan, I reveal that the Bank of Japan will report 5 trillion yen losses at worst yearly and the remittance from the Bank of Japan to Ministry of Finance will stop for 19 years. Next, using the fiscal theory of price level with long-term debt, I investigate the effects on the price level of the fiscal cost caused by the interest on excess reserves and the change of maturity structure. I find that the interest on excess reserves with huge excess reserves leads to inflation. I also reveal that the change of the maturity structure by ceasing to purchase JGBs decreases the price level instantaneously and then subsequently inflation occurs in short run.

Syed Hussain; Lahore University of Management Sciences, Lin Liu; University of Liverpool

Using Exogenous Changes In Government Spending To Estimate Fiscal Multiplier For Canada: Do We Get More Than We Bargain For?

In this paper, we estimate the size of government spending multiplier in Canada by constructing a new variable about news of exogenous government spending changes. We define exogenous changes in government spending as the ones not motivated by contemporaneous movements in the economy. We use the budget speeches and other government documents of Canada to record different

government spending changes, their sizes, and the motivations behind them from 1975:1 - 2012:2. We then classify these changes along the lines of Cloyne (2013) into exogenous and endogenous changes and use their present discounted values as news about future changes in government spending. The estimates for government spending multipliers from a VAR with shock to our newly constructed news variable are considerably bigger than the estimates found in the literature. Our estimates lie in the range of 4-6. We argue that the news variable affects output through channels other than increase in government expenditure. In particular, we suggest that changes in consumer sentiments caused by announcement about future increases in government expenditure can affect output before government spending affects output. Further results show that consumption, investment, hours, and wages all rise following a shock to the news variable

Frederik Lundtofte; Lund University, Jens Forssbaeck; Lund University, Anders Wilhelmsson; Lund University

Loan Pricing Over The Business Cycle

Based on a screening model, we hypothesize that borrower risk will be over-(under-)priced in recessions (booms), and the loan spreads' sensitivity to default risk as a function of economic growth will be inverse U-shaped. We test this prediction using a sample of 5,300 U.S. commercial loans contracted between 1987 and 2012, and find that the data support the prediction. The result is particularly strong at business cycle peaks: in the main results, moving from zero real GDP growth to the 99th percentile of economic growth, the responsiveness of the spread to borrower risk (the "price of risk") is more than halved. The results are robust to a variety of alternative specifications and competing explanations.

Yasuhiro Nakamoto; Kansai University

Heterogenous Utility Function, Non-degenerate Equilibrium And Wealth Distribution In A Neoclassical Growth Model

We introduce the heterogeneity of utility function into a simple neoclassical growth model with finitely many, infinitely lived agents. The assumption of heterogeneous utility function generates the heterogeneities of EIS (the

elasticities of intertemporal substitution in consumption), thereby implying that our economy has various growth rate of private consumption. Then, our contributions are as follows. First, we analytically characterize the steady-state levels of individual capital under the general form of utility function. Next, specifying the utility function as the type of stone-geary type, we make use of a variable-heterogeneous EIS among agents, and confirm the steady-state characterization of relative wealth and its dynamic behavior. Finally, we make the simulation in two cases of initial distribution of wealth: the normal distribution and the distribution in the U.S. economy.

Session 8.3

Chair: Chun-Yu Ho

Zelong Yi; Shenzhen University

Digital Piracy And Quality Disclosure

In this paper, we investigate how a firm selling just-developed digital products is influenced by piracy in terms of pricing, information disclosure policy and profitability. Specifically, we consider a monopolist, the quality of whose products is unknown to customers. It may choose to disclose the quality to the public at a positive cost. We simultaneously capture the effects of asymmetric information and piracy. We unexpectedly find that, in equilibrium, the firm's profit may strictly decrease with the anti-piracy enforcement given that the quality is not too high. This is because, with stronger enforcement, the firm has more incentives to disclose the quality and customers' rational expectation towards quality when this information is concealed is lowered. The presence of piracy thus allows the firm to manipulate customers' belief about the quality of its product for its own benefit. Hence, contrary to conventional wisdom, we reveal that weak anti-piracy enforcement may increase the legal firm's profit. Furthermore, when the product quality is endogenously determined, we find that a nonrestrictive enforcement policy towards piracy may not hinder the firm's incentive to invest in product innovation.

Seulgi Yoo; Sogang University

An Analysis Of Vertical Integration In The Korean Movie Industry: Production, Distribution, And Exhibition

This study analyzes the effects of vertical integration on the exhibition market using screen-level data during 2012-2014 in Korea. Specifically, I separate the effects of vertical integration into the market power of the integrated firms and the effects of movies that have integrated line in production-distribution-exhibition by the same integrated firm. I use a probit model and tobit model to show a theater's decision that whether the theater exhibits a movie and how many times it exhibits a movie. The main finding of this study is that the movies having integrated line have positive effects on the theater's decision because

transaction cost is reduced and revenue sharing scheme is adjusted in case of these movies but the integrated firms do not have their market power. I also suggest that theaters prefer the movie produced and distributed by the same firm, even though the firm is their competitor. These results imply that the movie having integrated line has a comparative advantage and integrated firms do not restrict the competition in exhibition market.

Xiaoxuan Meng; Hong Kong University of Science & Technology

Multi-attribute Product, Consumer Trust, and Policy Implications

This paper considers a reputation model of a seller of a product with both search and experience attributes, and that the two attributes are interdependent in consumers' valuation of the product. When the two attributes are complements (substitutes), i.e., increase in one attribute raises (lowers) the marginal value of the other attribute, the seller inflates (lowers) the search attribute to help maintain its reputation for a high experience attribute. Our analysis shows that the level of search attribute increases in the seller's discount factor when the two attributes are complements but decreases in his discount factor when the two attributes are substitutes. When applied to the analysis of counterfeiting, our framework implies that counterfeiters produce at a higher experience attributes than generic-product sellers. When the two attributes are complements, improvement in experience attribute is achieved by commitment to a lower bound on the search attribute, but when the two attributes are substitutes, this is achieved by committing to an upper bound on the search attribute.

Fan Li; Shenzhen University

Scores Vs. Stars: A Regression Discontinuity Study Of Online Consumer Reviews

With the rising popularity of consumer reviews, the design of the review system becomes increasingly crucial for e-commerce platforms and online retailers in their business decision makings. Though the relationship between consumer reviews and sales have been extensively studied, little has been done on the effects of different review designs. In this paper, we collect detailed review data from Meituan.com, a popular Chinese shopping website, to examine the effects of numerical presentation of consumer reviews (detailed to one decimal place)

and graphical presentation of consumer reviews (in half-stars) on sales. Using a regression discontinuity design, we find that while consumer review scores affect sales positively, the star presentation can create negative, rather than positive, jumps at cutoffs. Consumers restrict their attention to a star category, therefore, the “best” sellers in a lower star category are better off than the “worst” sellers in a higher star category. The incentive for review manipulation is strongly reduced, which in the long run will create trust and confidence for the review system as well as the sellers. For those sellers that are just below the cutoffs, simply crossing over the cutoffs would not lead to higher sales. Instead, they will have to substantially improve their service quality to attract consumers.

Session 8.4

Chair: Kabir Hassan

Congyi Zhou; Tsinghua University

Financial Literacy And Risky Asset Holdings: Evidence From China

Although financial literacy is an essential requirement for participating in financial markets, the level of financial literacy of Chinese consumers is low compared with consumers in developed countries. Using data from the 2014 China Survey of Consumer Finances, we examine the relationship between financial literacy and the risky asset holding behavior of Chinese households, in the context of an emerging financial market with distinct institutional background. The findings reveal that consumers with higher levels of financial literacy are more likely to hold risky financial assets than are consumers with lower levels. The potential impacts derive mainly from advanced financial literacy.

Moinak Maiti; Pondicherry University, A Balakrishnan; Pondicherry University

Is Human Capital The Sixth Factor

A six factor model designed for capturing the size, value, profitability, investment and human capital patterns in average portfolio returns performs better than both Fama-French (1993) three and Fama-French (2015) five factor model, and performance of the model is not sensitive to the technique its factor variables are defined. The six factor model's main problem is its failure in capturing the average returns on "microcap with low value stocks that are highly profitable invest aggressively for asset growth but invest much lesser for human growth" and "microcap with unprofitable stocks whose returns behave like those low value firms with conservative investment". Study finds the investment factor (CMA) of Fama-French (2015) five factor model as the redundant factor for describing the portfolio average returns in the study sample.

Chuyi Yang; Nanyang Technological University

Law Firm Expertise And Agency Problem In Securities Class Action Lawsuits

In this paper, we aim to measure expertise and agency problem of law firms in securities class action lawsuits and study whether law firms matter in the outcomes of lawsuits. Average Settlement Rate is a proxy for law firm expertise and measures the ability of law firm to settle the case. Average Case Length is a proxy for law firm agency problem, since law firms with larger agency problem will file for frivolous lawsuits which settle quickly with smaller amount of settlement, in order to recoup their attorney fees. It is found that law firms with higher prior average Settlement Ratio and longer Case Length are more likely to be skilled law firms with less agency problem. Cases conducted by skilled law firms with less agency problem are more likely to be settled, have more negative cumulative abnormal return during the filing date, won larger settlement amount and are associated with larger short interest in the filing month. In addition, market share of law firms increases after performing as skilled law firms. Overall, predictive power and persistence of law firm expertise amount to a law firm fixed effect in the class action lawsuits.

**Zhuoqiong Chen; London School of Economics and Political Science,
Tobias Gesche; University of Zurich**

Persistent Bias In Advice-giving

We show that a one-off incentive to bias advice has a persistent effect on advisers' own actions and their future recommendations. In an experiment, advisers obtained information about a set of three differently risky investment options to advise less informed clients. The riskiest option was designed such that it is only preferred by risk-seeking individuals. When advisers are offered a bonus for recommending this option, half of them recommend it. In contrast, in a control group without the bonus only four percent recommend it. After the bonus was removed, its effect remained: In a second recommendation for the same options but without a bonus, those advisers who had previously faced it are almost six times more likely to recommend the riskiest option compared to the control group. A similar increase is found when advisers make the same choice for themselves. To explain our results we provide a theory based on advisers trying to uphold a positive self-image of being incorruptible. Maintaining a positive

self-image then forces them to be consistent in the advice they give, even if it is biased.

Session 8.5

Chair: Lars Lefgren

Yoko Niimi; Asian Growth Research Institute, Charles Yuji Horioka; Asian Growth Research Institute

You Can't Take It With You: The Saving Behavior Of The Elderly In Japan

This paper attempts to assess the relative importance of precautionary saving and bequest motives in explaining the saving behavior of the retired elderly in Japan using unique information from two household surveys—namely, the Survey on Households and Saving and the Preference Parameters Study. Taken together, our analyses of these two datasets show that both precautionary saving and bequest motives are important drivers behind the lower than expected wealth decumulation rate of the elderly but that precautionary saving plays an especially important role, at least in the case of Japan. We also find that the financial burden of parental care can be significant enough to affect the saving behavior of the elderly in Japan. Given that parental care responsibilities tend to arise relatively late in life, often after retirement, in the case of Japan, our results suggest that it is important to take into account the financial burden of parental care when analyzing the saving behavior of the elderly.

Amornrat Apinunmahakul; NIDA

Saving For Old Age In Thailand

Due to a rapid transition of Thailand demographic structure, the country has only 15 years to prepare for the super aged society where one third of Thai citizens will age 60 years old and above. The situation places a threat to Thai economy as the 2016 Socio-Economic Survey conducted by the Office of National Statistics revealed that about 40 percent of Thai workers do not yet have any saving for retirement. Only 4 percent of the retirees can rely on their own saving as the major source of income. With the expansion of life expectancy of Thai people, saving for old age is a necessary condition to ensure that Thai elderly would have enough income to maintain their living standard after retirement. The objectives of this study are two folds. First is to analyze whether or not the

Personal Income Tax (PIT) deductions for old age saving promotes household saving and wealth accumulation. Second objective is to explore whether an individual's self-insurance such as family and close friends, individual social participations cause a crowding in or crowding out saving. Using a surveyed data of 1,500 working population residing in Bangkok Metropolitan area and its nearby cities, the Tobit regression of this study found that only the PIT deductions on life insurance premium and a contribution to a private provident fund significantly statistically brought up both household saving and household wealth. Other items of the PIT deductions like an investment in the Retirement Mutual Fund (RMF), the Long Term Equity Fund (LTF), and a contribution to public provident fund of public workers, the social security fund of private workers, or the pension fund for private school teachers did not have any significant influence on household saving. The main explanatory variables that positively significantly affect saving and wealth accumulation are years in school, the Civil Servant Medical Benefit Scheme (CSMBS), an individual's social participations particularly in organizations focusing on saving and borrowing activities whilst households with insufficient income for living especially those in the first income quintile (the poorest group) trended to have less saving and less wealth accumulation as compared to the reference group, i.e., the fifth income quintile (the richest group). As the results, the study suggests that PIT deduction might not be a good policy option to promote income security for old age. Government should incorporate financial knowledge in all educational levels so as to cultivate a proper financial attitude and financial behavior to the younger generations, encourage social participations or community's activities that engaging on saving cooperation. Furthermore, some kinds of subsidies that help to reduce household expenditure especially for those in the first income quintile (the poorest group) would be an indirect mean to promote saving among the poor.

Masaya Yasuoka; Kwansai Gakuin University

Elderly Care Service In An Aging Society

An increase in life expectancy brings about an aging society. In an aging society, the demand for elderly care service increases. This paper examines how an aging society affects the demand for elderly care service and the labor market of elderly care service. Related literatures show that an aging society raises the labor share of elderly care service. However, considering closed economy that

the saving affects the capital stock, an aging society does not always raise the labor share of elderly care service because the wage rate of final goods sector increases with an aging society. This effect prevents the labor supply of elderly care service from increasing. In addition to this result, this paper examines whether the subsidy for elderly care service increases the demand for elderly care service or not. As a result, this subsidy does not always increase the demand for elderly care service because of tax burden.

Tatsuyoshi Miyakoshi; Hosei University

Optimal Population Growth In An Aging European Society

In developed countries, natural population growth rates are close to zero, and populations are aging rapidly, which is causing the burden of eldercare to fall on the young. A solution in European Union to this problem has been found in increased eldercare provision by migrants and young families. This solution commenced in 1990, when the natural increase of population in European Union cuts off one million (i.e., the population growth rate is about zero) and migrations increase, as seen in Figure 1. This change in population and migration was dramatic phenomena compared with the US. By considering the maximization of a utility function subject to the economy-wide resource constraint, Samuelson (1975), Deardorff (1976), Groezen et al. (2003), Jaeger and Kuhle (2009), De la Croix and Ponthière (2010) De la Croix et al. (2012) have computed the optimal long-term values of consumption and fertility and studied what a planner (or a government at a steady state) should do.

Previously the elder did not need care because of short life. However, nowadays, eldercare is necessary by the elder life having been prolonged. Thus, the eldercare by child and immigrant becomes serious problem. It is now necessary for government to reconsider the optimal population growth rate by accounting for eldercare. The purpose of this paper is to examine theoretically optimal population growth rate in an economy with overlapping generations by adding an eldercare system. We find that the optimal growth rate is closer to zero when society needs more eldercare under a more pessimistic view of the future. Therefore, the present zero population growth rates in the EU countries may be the optimal rate for the EU with its aging society. However, when the individual does not need eldercare and has a more optimistic view of the future, the optimal population growth rate is closer to 1, causing an explosion in the population.

This paper is organized as follows. Section 2 develops an overlapping generations model that includes eldercare by migrants and the young. Sections 3 show optimal population growth. Section 4 presents concluding remarks.

Session 8.6

Chair: Ramo Gencay

Masao Nakagawa; Hiroshima University, Asuka Oura; Daito Bunka University, Yoshiaki Sugimoto; Kansai University

Economic Growth With Locked-in Fertility: Under-and Over-investment In Education

This research argues that the rigidity of fertility decisions brings about over- and under-investment in education, thereby delaying human capital accumulation and economic growth. In underdeveloped stages, large family sizes prevent parents from revising their education plans upward even if their children are unexpectedly competent. In advanced stages, by contrast, having fewer children leaves a generous budget for education, which discourages downward revisions for children who are unexpectedly incompetent. The impact of these 'lock-in effects' depends in part on the degree of parental altruism.

Atsushi Miyake; Kobe Gakuin University, Masaya Yasuoka; Kwansai Gakuin University

Education Subsidy And Child Allowance In An Endogenous Fertility Model

This paper presents consideration of the effects of child allowances and subsidies for private education investment on fertility and private education investment. The level of public education expenditure plays an important role in the effects of child care policies. To raise fertility, although child allowances are effective in an economy with low public education investment, subsidies for education investment are effective in an economy for which public education investment is high. The results presented in this paper are helpful for reconciling the conflicting results reported from previous studies. In addition, this paper presents an examination of the effects of those child care policies on pension benefits. A subsidy for private education can raise both fertility and pension benefits.

Xiangcai Meng; Woosong University

Curse Or Blessing: Investigating The Income And Education Of The First-born And Only-boy

Due to social and cultural reasons, birth order may have different qualitative and quantitative implications on education and income in urban and rural areas. In this paper, we examine this issue by using the Japanese data. We find that first-born males enjoy more education than later-born males regardless of rurality of residence at age 15, while no such effect exists for females. In contrast, we find little evidence of first-borns having more income than later-borns. We further find that only for males who lived in a rural area at age 15, the presence of male siblings is associated with higher income. These results suggest a potential disadvantage faced by the only-boys born in a rural area.

T. Terry Cheung; Washington University in St. Louis

Structural Change, Demographic Transition And Fertility Difference

This paper asks if the force that drives the demographic transition in the developed countries and the force that makes less developed countries having higher fertility rate are the same one. The hypothesis is that the sectorial fertility goes a long way in explaining the fertility transition and the cross-country fertility difference. In a less developed stage, as agricultural productivity is low and as physical labors play a much important role in the farming sector, the economy is usually populated with agricultural workers who have higher birth rate. When the economy develops, the share of agricultural employment and sectorial fertility both decline, hence having an aggregate implication in the overall fertility rate. By using detailed U.S. census data, this paper shows that such pattern is consistent with historical description in U.S. from the mid-19th century to the eve of the baby boom. The general equilibrium model in this paper, when calibrated by using the U.S. data, is able to replicate the features of the sectorial fertility rates and sectorial employment share in the U.S. for 60 years.

Session 8.7

Chair: Jubo Yan

Jiaying Cheng; Hong Kong University of Science and Technology

Why Rural Children Are More Patient? Evidence From China

Economic-related preference, such as patience, can influence individual's decision making, and can be rationalized by past experiences and transmit across generations. In this paper, a general model is constructed to explain the rural/urban difference in time preference. There are two critical features in rural life: (1) agricultural work that pertinent to periodic investment and harvest; (2) imperfect credit market. Both features predict that the rural sample would be more patient than urban sample. Economic-related preference, such as patience, can influence individual's decision making, and can be rationalized by past experiences and transmitted across generations. In this paper, a general model is constructed to explain the rural/urban difference in time preference. There are two critical features in rural life: (1) agricultural work that pertinent to periodic investment and harvest; (2) imperfect credit market. Both features predict that the rural sample would be more patient than urban sample. Indeed, this paper documents a higher rate of time preference associated with rural hukou from 2010 Chinese Family Panel Studies Children Survey. Rural children aged between 3 years and 5 years are more likely to delay gratification by around 6.8 percent point than urban peers. If we treat pre-schooler's preference as a socialized product mainly at home, it can be a proxy of their parents' preference. Same conclusion is drawn from adult sample in 2011 China Household Financial Survey and 2015 China Employer-Employee Survey as well. In case that the hukou status is endogenously determined, for example, the rural-urban migration is self-selected, I further employ parents' hukou status at three years old as a proxy for children's hukou status. The living environment of parents has larger impact on children's time preference. Results above, on the one hand, confirms the transitivity of time preference, and helps to understand the origin of time preference on the other.

Yoko Sakai; University of California, Riverside, Kazuya Masuda; Hitotsubashi University

Effects of adult supervision on adolescent risky sexual behavior in the Philippines

This paper has investigated the short-term effects of maternal absence and educational attainment due to over-sea working on adolescent pregnancy using data from the Philippines. To control the endogeneity problem of parental absence, I have used fixed effect estimation and instrumental variables

estimation utilizing the employment rates of destination countries as an instrument. However, these are weak instrument, so I could not obtain consistent results from IV regressions. The results from the FE estimations suggested that maternal absence significantly affected a rate of first sexual intercourse before age 17 in the short run, but it does not have an impact on childbearing before age 17. First sexual intercourse in early age induces early teenage motherhood, therefore, maternal supervision plays an important role to protect teenagers from risks. Schooling contributes to reduction of teenagers' sexual risky behavior and motherhood significantly. It implies that schooling system works not only for studying but also for social protection of children. The results also suggested that the presence of a parent is more crucial than schooling as a function of supervision. However, I could not find valid instruments for parental absence, therefore I may obtain different results using different methodologies.

**Rezanti Pramana; SMERU Research Institute, Mayang Arum Anjar Rizky;
SMERU Research Institute**

Marriage Timing And Subjective Well-being: Evidence From Age At First Marriage In Indonesia

Rezanti Pramana and Mayang Rizky Previous studies on age at marriage focused primarily on the disadvantage of early marriage, specifically the negative health and educational consequences experienced by women. Little discussion has explored in the area of subjective well-being. Using data from Indonesian Family Life Survey (IFLS), this paper aims to analyze the impact of age at first marriage on subjective well-being. The scatter plot shows that the relationship is nonlinear. The subjective well-being is getting higher as women start to tie the knot earlier but then reach its peak at the age of 30 and then going lower as they marry late. To see the impact of age at first marriage on subjective well-being, this paper uses instrumental variable of age at menarche since it has been proven to affect marriage timing in a random manner. It stresses that each additional year that menarche is delayed is associated with an increase of 0.18 years in age at first marriage. The two stages least square estimation shows that marrying late affects subjective well-being negatively. This result provides different conclusion with the study in Kenya that delayed marriage appears to have positive influence on a wide range of outcomes for women. Cultural norms may play a role and this suggests that, to some extent, marrying late will lead to a higher subjective well-being but then will be lower as they reach the peak.

Rizky Afian; Padjadjaran University, Ibnu Habibie; Padjadjaran University

**Factors Related To Subjective Quality Of Sleep In A Developing Country:
An Evidence From Indonesia**

The quality of sleep is a fundamental factor to physical and mental health that affects personal well-being and productivity. Poor sleep quality leads to poor performance at school and work which, aggregately, could have a bad impact on the economy of a country. However, in most developing countries, this matter is often overlooked. This paper studies socio-economic status (SES), demographic, health and lifestyle indicators to identify their relevance to self-assessment on sleep quality. In doing so, we used the ordered probit regression method to analyze the sample which consisted approximately of 4,200 men and women aged 15-87 from the Indonesian Family Life Survey 2014. Interestingly, we found that Javanese respondents exhibited significant positive probability to have better sleep quality. Married women have a higher probability for a poor quality of sleep compared to the other. Some variables of SES had a significant correlation (i.e. house ownership, household expenditure, the level of education, and type of job). Self-assessment on health in general and life satisfaction have a strong positive correlation, while the frequency of depression and smoking behavior have a strong negative correlation. Therefore, because this issue has a national economic impact, we hope this study could raise awareness on the matter of sleep quality from an individual to a governmental level, especially in a developing country.

Session 8.8

Chair: Qiyan Ong

Tomoko Kishi; Nanzan University

State Dependence In Labour Market Transitions: A Comparison Between Australia And Japan

This paper compares state dependence in employment, that is, the extent to which current employment status depends on that in the previous period, between Australia and Japan, using econometric methods in which initial values, unobserved heterogeneity, and endogeneity of the dependent variables are controlled for. The estimation results reveal that state dependence, measured by the marginal effects of the lagged latent employment variables, tends to be lower for Japanese than Australian men. The marginal effects of the lagged 'permanent' or 'ongoing' employment were also lower in Japan than Australia. On the other hand, the effects from the employment status in the initial period are higher for Japan than Australia, particularly for men. These results suggest that, in Japan, past employment status has persistent effects in the subsequent years and transitions in the labour market the mid-career tend to be difficult. Labour market reforms to provide those unemployed or under-employed with more opportunities to restart their careers are required in Japan.

Matjaz Koman; University of Ljubljana, Janez Prasnikar; University of Ljubljana, Tjaša Redek; Faculty of Economics, Jan Svejnar; Columbia University

The Great Depression And Bargaining Power In Europe: Tradeoff Between Wages, Employment And Profit

We estimate the evolution of the relative bargaining power and fear of disagreement of employees and management in fourteen European countries before and during the Great Recession that affected Europe in 2009. We adapt Svejnar's (1986) generalized Nash bargaining model and apply it to a comprehensive firm-level dataset to assess the impact of the economic downturn on the tradeoff between wages, employment and profits. The results show that in general the bargaining power of workers across Europe was high, both due the

'great moderation model of Europe' as well as national industrial relations. Importantly, this allowed the workers to appropriate the larger share of value added. In the crisis, their bargaining power on average increased further, squeezing the profits. Only in a few countries workers and owners had equal bargaining power - as a consequence of an implicit social agreement with labour taking part of the burden of moderating the impact of the crisis. The results also show that in the majority of countries workers were risk loving before and during the crisis. However during the crisis they became less risk loving, putting more emphasis on job security. In the context of financial crisis, the discussion complements the financial constraints discussions by pointing to the importance of bargaining (and lack thereof) in the absence of externally available funds. JEL Codes: J50, C71

Filippo Di Mauro; National University of Singapore

Wage bargaining regimes and firms' adjustments to the Great Recession

The paper aims at investigating to what extent wage negotiation set-ups have shaped up firms' response to the Great Recession, taking a firm-level cross-country perspective. We contribute to the literature by building a new micro-distributed database which merges data related to wage bargaining institutions (Wage Dynamic Network, WDN) with data on firm productivity and other relevant firm characteristics (CompNet). We use the database to study how firms reacted to the Great Recession in terms of variation in profits, wages, and employment. The paper shows that, in line with the theoretical predictions, centralized bargaining systems – as opposed to decentralized/firm level based ones – were accompanied by stronger downward wage rigidity, as well as cuts in employment and profits.

Alberto Iniguez-Montiel; University of Tokyo, Daiji Kawaguchi; University of Tokyo

The Impact Of The Mexican Drug War On Employment And Consumption: 2000-2012

During December 2006 to November 2012, Mexico experienced an unprecedented internal conflict known as the war on drugs, triggered by the militarized campaign against drug-trafficking organizations (DTOs), which was

implemented by former president Felipe Calderon with the main objective to combat drug trafficking and debilitate DTOs in Mexico by capturing or killing the core leadership of criminal networks. This study analyzes the impact of the drug war on Mexico's labor market and household consumption by using instrumental-variable (IV) estimation, presenting novel evidence on the issue. We instrument for homicide rate, which is used as our best proxy for violent crime, by using the plausibly exogenous variation in the number of DTOs operating in each municipality in Mexico from 1998 to 2010. Our IV results show that an increase of one homicide out of 100,000 individuals in the war-affected municipalities increased both the male intensive margin of labor and the female extensive margin of labor significantly by 0.18%, whereas male and female hourly wages decreased significantly by 1.1 and 0.52%, respectively, due to the conflict. By further disaggregating the impact of the war by job type and occupation, we identify that formal- and informal-sector employment decreased and increased, respectively, in a significant manner for both males and females. Furthermore, agricultural employment, associated with the subsistence economy, was found to have risen sharply and significantly for males during 2000 to 2010, being the primary cause of the employment increase in the male informal sector. The female added-worker effect is explained by the significant rise in personal-service-, trade- and agricultural-type occupations, which are most likely to be found within the informal sector of the economy. The decline in formal-sector employment is mainly related to the reduction in manager-, office- and education-type occupations for both genders. We further investigated the impact of the war on household consumption, and found that a one-unit increase in the homicide rate reduced total and per-capita consumption significantly by 0.55% in the war-affected regions. This implies a huge decline in the living standards of affected households due to the negative impact of the war on most consumption categories except for one, alcohol and tobacco, which is found to have increased sharply and significantly in the affected municipalities during 2008 to 2012.

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