2018 KAEA-AEA SESSIONS The Korea-America Economic Association (KAEA)

2018 ASSA Annual Meetings, Philadelphia, PA, January 05-07

Summary

KAEA-AEA Sessions

1. Microeconomics Session

(Recent studies in Applied Microeconomics)

Saturday, Jan. 6, 2018, 12:30 PM - 2:15 PM (Marriott Philadelphia Downtown, Grand Ballroom Salon C)

Organized by Byung-Cheol Kim (University of Alabama)

- Paper 1. "Online Intermediaries and the Consumption of Polarized and Inaccurate News During the 2016 Presidential Election", by Susan Athey*, Stanford University
- Paper 2. "**Price Formation in Bilateral Trade: Evidence from Online Bargaining**", by **Steven Tadelis***, University of California Berkeley
- Paper 3. "**Optimal Sequential Decision with Limited Attention**" by **Yeon-Koo Che***, Columbia University
- Paper 4. "Second-degree Price Discrimination by a Two-sided Monopoly Platform" by Doh-Shin Jeon*, Toulouse School of Economics

2. Macroeconomics Session (Heterogeneous Agents in Macroeconomics)

Saturday, Jan. 6, 2018, 8:00 AM - 10:00 AM (Marriott Philadelphia Downtown, Meeting Room 309)

Organized by Yoosoon Chang (Indiana University

- Paper 1. "Taxing Top Earners: A Human Capital Perspective" by Mark Huggett*, Georgetown University
- Paper 2. "Financial Frictions, Asset Prices, and the Great Recession" by José-Víctor Ríos-Rull*, University of Pennsylvania

- Paper 3. "On Worker and Firm Heterogeneity in Wages and Employment Mobility: Evidence from Danish Register Data" by Rasmus Lentz*, University of Wisconsin – Madison
- Paper 4. "Identifying and Estimating the Longrun Effect of Income Distribution on Aggregate Consumption" by Hwagyun Hagen Kim*, Texas A&M University
- **3. Econometrics Session** (Recent Developments in Factor Models and Time Series Analysis)

Saturday, Jan. 6, 2018, 10:15 AM - 12:15 PM (Marriott Philadelphia Downtown, Meeting Room 306)

Organized by Junsoo Lee (University of Alabama)

- Paper 1. "Shrinkage Combination for Vector Autoregressions" by Bruce Hansen (University of Wisconsin)
- Paper 2. "Factor-driven Two-regime Regression" by Myung Hwan Seo (Seoul National University)
- Paper 3. "Efficient Estimation of Panel Data Model with Interactive Effects Using High Dimensional Covariance Matrix" by Jushan Bai (Columbia University)
- Paper 4. "Constrained Factor Models for High-Dimensional Matrix-Variate Time Series" by Ruey Tsay (University of Chicago)
- Paper 5. "Large-N and Large-T Properties of Dynamic Panel GMM Estimators When Data Are Not Mean Stationary" by Seung C. Ahn (Arizona State University)

4. KAEA Workshop (I)

(Topics in Macroeconomics with Heterogeneous Agents)

Friday, January 5th, 4:00 PM - 6:00 PM

(Marriott Philadelphia Downtown, Meeting Room 501)

Organized by Yoosoon Chang, Indiana University

- 1. Hye Mi You, Hanyang University, "Rising Earnings Risk and Wealth Distribution with Housing"
- 2. Soojin Kim, Purdue University, "Social Insurance Program Design for the Disabled in an Equilibrium Model"

- 3. Serena Rhee, University of Hawaii at Manoa and RAND, "Disability Insurance: A Safety Net for the Unhealthy and Its Consequences on the Healthy"
- 4. Yoosoon Chang, Indiana University, "Estimating Heterogeneity in Recursive Preferences"

5. KAEA Workshop (II)

Organized by Kyoo il Kim, Michigan State University

Sunday, January 7, 12:30 PM - 1:50 PM

(Marriott Philadelphia Downtown, Meeting Room 501)

- 1. Soohun Kim, Georgia Institute of Tech, "Fund Runs and Market Frictions"
- 2. Yunjong Eo, University of Sydney, "The Role of Inflation Target Adjustment in Stabilization Policy"
- 3. JaeBin Ahn, International Monetary Fund, "Innovation and Corporate Cash Holding in the Era of Globalization"
- 4. Jeong Ho (John) Kim, Emory University, "Beta Anomaly and Mutual Fund Performance"

6. KAEA Workshop (III)

Organized by Kyoo il Kim, Michigan State University, email: kyookim@msu.edu

Sunday, January 7, 2:00 PM - 3:20 PM

(Marriott Philadelphia Downtown, Meeting Room 501)

- 1. Hyuncheol Bryant Kim, Cornell University, "Knowing is Not Half the Battle: Impacts of Information from the National Health Screening Program in Korea"
- 2. Miyoun Paek, University of Cincinnati, "Outsourcing Equity Funds and Reputation Benefits: The Korean National Pension Fund"
- 3. Young-Joo Kim, Hongik University, "The Lasting Effect of Education on Health: The Case of Obesity in the UK and US"
- 4. Soohyung Lee, Sogang University, "Endogenous Market Formation: Theory and Evidence from Chilean College Admissions"

ABSTRACTS

1. Microeconomics Session

Saturday, Jan. 6, 2018, 12:30 PM - 2:15 PM (Marriott Philadelphia Downtown, Grand Ballroom Salon C)

- Session Title: Recent studies in Applied Microeconomics
- JEL codes: D72, L1
- Chair information: Byung-Cheol Kim (University of Alabama)

Paper 1. "Online Intermediaries and the Consumption of Polarized and Inaccurate News During the 2016 Presidential Election"

Susan Athey*, Stanford Graduate School of Business, NBER, Microsoft Research New England (athey@stanford.edu) Markus M. Mobius, Microsoft Research New England (markusmobius@gmail.com)

Discussant: Karam Kang, Carnegie Mellon University (kangk@andrew.cmu.edu)

Abstract:

Paper 2. "Price Formation in Bilateral Trade: Evidence from Online Bargaining"

Matthew Backus, Columbia University (matthew.backus@columbia.edu) Tom Blake, eBay (thblake@ebay.com) Bradley Larsen, Stanford University (bjlarsen@stanford.edu) **Steven Tadelis***, University of California Berkeley (stadelis@berkeley.edu)

Discussant: Jihye Jeon, Boston University, jjeon@stern.nyu.edu

Abstract: We study patterns of price formation in bilateral trade using new publicly available data describing 25 million bargaining sequences from eBay's Best Offer platform. We document both behavior and outcomes, and relate the ob- served patterns to "rational" and "psychological" theories of bargaining. We find that bargaining sequences are short, and conditional on an offer being made, highly likely to succeed. Bargaining patterns can be explained by both player and prod- uct heterogeneity. We also find that players' bargaining strength impacts the out- comes, and that players exhibit equitable behavior by making offers that split-the- difference between negotiating positions.

Paper 3. "Optimal Sequential Decision with Limited Attention"

Yeon-Koo Che*, Columbia University (yeonkooche@gmail.com) Konrad Mierendorff, University College London (k.mierendorff@ucl.ac.uk) Discussant: Jeong-Ho "John" Kim, Emory University, jeong-ho.john.kim@emory.edu

Abstract: We consider a dynamic model of information acquisition. Before taking an action, a decision maker may direct her limited attention to collecting different types of evidence that support alternative actions. The optimal policy combines three strategies: (i) immediate action, (ii) a contradictory strategy seeking to challenge the prior belief, and (iii) a confirmatory strategy seeking to confirm the prior. The model produces a rich dynamic stochastic choice pattern as well as predictions in settings such as jury deliberation and political media choice.

Paper 4. "Second-degree Price Discrimination by a Two-sided Monopoly Platform"

Doh-Shin Jeon*, Toulouse School of Economics; Centre for Economic Policy Research (CEPR), (dohshin.jeon@gmail.com) Byung-Cheol Kim, University of Alabama (byungcheolk@gmail.com) Domenico Menicucci, Universita' degli Studi di Firenze (domenico.menicucci@unifi.it)

Discussant: Ilwoo Hwang, University of Miami, ihwang@bus.miami.edu

Abstract: In this article we study second-degree price discrimination by a two-sided monopoly platform. We find novel distortions that arise due to the two-sidedness of the market,

which make the standard result "no distortion at top and downward distortion at bottom" not hold. They generate a new type of non-responsiveness, different from the one found by Guesnerie and Laffont (1984). However, the platform may mitigate or remove non-responsiveness at one side by properly designing price discrimination on the other side. We also analyze welfare effect of price discrimination. These findings help to address our central question, i.e., when price discrimination on one side substitutes for or complements price discrimination on the other side. As applications, we study net neutrality regulation and mechanism design for an advertising platform mediating advertisers and consumers.

2. Macroeconomics Session

Saturday, Jan. 6, 2018, 8:00 AM - 10:00 AM (Marriott Philadelphia Downtown, Meeting Room 309)

• Session title: Heterogeneous Agents in Macroeconomics

- JEL codes: D13, D31, E22, E24, J6, O4
- Chair information: Yoosoon Chang, Indiana University, email: <u>yoosoon@indiana.edu</u>

Paper 1. "Taxing Top Earners: A Human Capital Perspective"

Mark Huggett*, Georgetown University (<u>mh5@georgetown.edu</u>) Alejandro Badel, BLS, (<u>ale.badel@gmail.com</u>) Wenlan Luo, Tsinghua University (<u>luowl@sem.tsinghua.edu.cn</u>)

Abstract: An established view is that the revenue maximizing top tax rate for the US is approximately 73 percent. We argue that theory and evidence suggest a lower value. First, theory provides a robust formula where three elasticities determine this top rate. Second, theory and measurement suggest that the two new elasticities in the formula are positive and reduce the revenue maximizing rate. Third, a human capital model is provided that follows the logic of the formula, is consistent with regression evidence on the response of income and tax revenue to changes in the top tax rate and yet features a revenue maximizing top rate well below 73 percent.

Summary: This paper studies the consequences of increasing the marginal tax rate on U.S. top earners and shows that the endogenous fall in skill investment in response to the higher top tax rate is quantitatively very important in calculating the revenue maximizing top tax rate for the US.

Discussant: Hye Mi You, Hanyang University; email: hyemiyou@hanyang.ac.kr

Paper 2. "Financial Frictions, Asset Prices, and the Great Recession"

José-Víctor Ríos-Rull*, University of Pennsylvania (<u>vr0j@upenn.edu</u>) Zhen Huo, Yale University (<u>zhen.huo@yale.edu</u>)

Abstract: We study financial shocks to households' ability to borrow in an economy that quantitatively replicates U.S. earnings, financial, and housing wealth distributions and the main macro aggregates. Such shocks generate large recessions via the negative wealth effect associated with the large drop in house prices triggered by the reduced access to credit of a large number of households. The model incorporates additional margins that are crucial for a large recession to occur: that it is difficult to reallocate production from consumption to investment or net exports, and that the reductions in consumption contribute to reductions in measured TFP.

Summary: This paper studies the role of the reduced access to credit of households in generating a large recession, through a drop in house prices and negative wealth effects.

Discussant: Soojin Kim, Purdue University; email: soojink@purdue.edu

Paper 3. "On Worker and Firm Heterogeneity in Wages and Employment Mobility: Evidence from Danish Register Data"

Rasmus Lentz*, University of Wisconsin – Madison (<u>raslentz@gmail.com</u>) Suphanit Piyapromdee, University College London (<u>s.piyapromdee@ucl.ac.uk</u>) Jean-Marc Robin, Institut d'Etudes Politiques de Paris (jeanmarc.robin@sciencespo.fr)

Abstract: In this paper, we propose an estimation method that allows for unrestricted interactions between worker and firm unobserved characteristics in both wages and the mobility patterns. Related to Bonhomme, Lamadon and Manresa (2014) (BLM), our method identifies double sided unobserved heterogeneity through an application of the EM-algorithm where the firm classification is repeatedly updated so as to improve on the likelihood function. In Monte Carlo simulations, we demonstrate that the cyclic updating of the firm classification provides a significant performance improvement. Firm classification is a result of both wage and mobility patterns in the data. We estimate the model on Danish matched employer-employee data for the period 1985-2011. The estimation includes gender, education, age and time controls. We find an increased sorting pattern over time, although overall sorting is modest. The wage gap between genders is decreasing over time. The contribution to the wage gap from mobility differences between the genders is also decreasing over time.

Summary: The authors develop an estimation method to identify double sided unobserved heterogeneity with updates, and apply it on Danish matched employeremployee data to study the evolution of labor market allocation through wage and job mobility patterns.

Discussant: Serena Rhee, University of Hawaii at Manoa; email: rhees@hawaii.edu

Paper 4. "Identifying and Estimating the Longrun Effect of Income Distribution on Aggregate Consumption"

Hwagyun Hagen Kim*, Texas A&M University (email: hkim@mays.tamu.edu) Yoosoon Chang, Indiana University (<u>yoosoon@indiana.edu</u>) Changsik Kim, Sungkyunkwan University (<u>skimcs@skku.edu</u>) Joon Park, Indiana University and Sungkyunkwan University (<u>joon@indiana.edu</u>)

Abstract: This paper identifies and estimates the long-run effect of income distribution on aggregate consumption, using income and expenditure data from the US Consumer Expenditure Survey. The permanent and transitory components of income and consumption distributions are obtained by the functional Beveridge-Nelson decomposition. The permanent income distribution consists of two stochastic trends,

from which we identify two factors, the level and spread factors, determining the permanent consumption. The level and spread factors change the permanent consumption through the changes in aggregate income and in redistribution of income, respectively.

Summary: This paper introduces the concept of cointegration between nonstationary time series of cross-sectional distributions, and uses it to study identification and estimation of the long-run effects of income distribution on aggregate consumption and its policy implications

Discussant: Yoosoon Chang, Indiana University; email: yoosoon@indiana.edu

3. Econometrics Session

Saturday, Jan. 6, 2018, 10:15 AM - 12:15 PM (Marriott Philadelphia Downtown, Meeting Room 306)

Session title: Recent Developments in Factor Models and Time Series Analysis

- JEL codes: C23, C40
- Chair information: Junsoo Lee, University of Alabama (jlee@cba.ua.edu)

Paper 1. "Shrinkage Combination for Vector Autoregressions"

Bruce Hansen*, University of Wisconsin (bruce.hansen@wisc.edu)

Abstract: This paper introduces Stein combination shrinkage for vector autoregressions (VARs). The proposed methods shrink unrestricted least-squares VAR estimates towards multiple user-specified linear constraints, including lag exclusion and autoregressive models. We propose weighted combination estimators, where the weights minimize an estimate of the mean-squared error (MSE) of a vector-valued parameter of interest. Particular attention is given to impulse response estimation and multi-period point forecasting. The combination estimators are similar to Stein shrinkage estimators. Our proposed weights are specific to the horizon, which allows the degree of shrinkage to adapt across horizons. The proposed methods are evaluated in a careful simulation experiment. The simulation evidence shows that the Stein combination methods have much lower MSE than conventional OLS and BVAR methods. We illustrate the methods with an application to a standard seven-variable system of U.S. macroeconomic aggregates. (http://www.ssc.wisc.edu/~bhansen/papers/var.html)

Paper 2. "Factor-driven Two-regime Regression"

Myung Hwan Seo*, Seoul National University (<u>myung.h.seo@gmail.com</u>) Sokbae Lee, Columbia University (<u>sokbae@gmail.com</u>) Yuan Liao, Rutgers University (<u>yliao@econ.rutgers.edu</u>) Youngki Shin, University of Technology Sydney (yshin12@gmail.com)

Abstract: We propose a novel two-regime regression model, where the switching between the regimes is driven by either observable or unobservable factors or by both. When the factors are not directly observable, we estimate them by the PCA of a much larger data set. This approach is attractive because the factors represent the economy-wide shocks and thus factor-driven regime switching is more appealing than the settings that have been widely used in practice such as where the regime is determined by a single observable variable or by an exogenous markov process. The estimation of this model is challenging both computationally and theoretically because both the estimated factors and multiple parameters are subject to a discontinuous transformation. Therefore, we show that our optimization problem can be reformulated as an iterative mixed integer optimization. The resulting algorithm can successfully handle the computational issue caused by multi-dimensional discontinuity. Furthermore, we derive the asymptotic distributions of the resulting estimator under the shrinking delta scheme. In particular, not only we establish the conditions on the factor estimation for the oracle property, which are different from those for smooth factor augmented models, but also we analyze a nonoracle case and show how the estimation error affects the asymptotic distribution of the regime-determining parameters. They are non-standard and non-pivotal, leading us to propose a bootstrap. Finally, we illustrate our methods using an economic application.

Paper 3. "Efficient Estimation of Panel Data Model with Interactive Effects Using High Dimensional Covariance Matrix"

Jushan Bai*, Columbia University (jb3064@columbia.edu) Yuan Liao, Rutgers University (<u>yuan.liao@rutgers.edu</u>)

Abstract: We consider the efficient estimation of panel data models with interactive effects, which relies on a high-dimensional inverse covariance matrix estimator. By using a consistent estimator of the inverse idiosyncratic covariance matrix, we can take into account both cross-sectional correlations and heteroskedasticity. In the presence of cross-sectional correlations, the proposed estimator eliminates the cross-sectional correlation bias, and is more efficient than the existing methods. The rate of convergence can also be improved. In addition, we find that when the statistical inference involves estimating a high-dimensional inverse covariance matrix, the minimax convergence rate on large covariance estimations is not sufficient for inferences. To address this issue, a new "doubly weighted convergence" result is developed. The proposed method is applied to the US divorce rate data. We find that our more efficient estimator identifies the significant effects of divorce-law reforms on the divorce rate, and provides tighter confidence intervals than existing methods.

Paper 4. "Constrained Factor Models for High-Dimensional Matrix-Variate Time Series"

Ruey Tsay*, University of Chicago (<u>ruey.tsay@chicagobooth.edu</u>) Yi Chen, Rutgers University (<u>vichen@stat.rutgers.edu</u>) Rong Chen, Rutgers University (rongchen@stat.rutgers.edu)

Abstract: In many scientific fields, including finance and meteorology, high-dimensional matrix-variate data are routinely collected over time. Matrix-variate factor models are an effective dimension reduction method for analyzing such data, because they incorporate the structural interrelations between columns and rows. Exploitation of natural structure in the loading matrices can further improve the efficiency in estimation and enhance interpretations of the estimated common factors. In this paper, we propose constrained and partially constrained factor models for matrix-variate time series. For estimation, we employ spectral decomposition of certain semi-positive definite matrices constructed from the cross-covariance matrices at nonzero lags. We establish asymptotic properties of the estimators when the dimension of the data and the dimensions of constrained row and column loading spaces go to infinity with the sample size. We show that the rates of convergence of the constrained matrix-variate factor loading matrices are much faster than those of the conventional matrix-variate factor analysis. We use simulation to

demonstrate performance of the proposed method and the associated asymptotic properties. We then apply the proposed analysis to Fame-French 10-by-10 portfolio return series and corporate financial 16-by-200 by matrix-variate time series.

Paper 5. "Large-N and Large-T Properties of Dynamic Panel GMM Estimators When Data Are Not Mean Stationary"

Seung C. Ahn*, Arizona State University (<u>miniahn@asu.edu</u>) Na Wang, Hofstra University (<u>na.wang@hofstra.edu</u>)

Abstract: For the dynamic panel data models with a large number of cross-sectional units (N) repeatedly observed over a short time period (T), the dependent variables are often assumed to be stationary in mean. This is because implementing in GMM the moment conditions relevant under the mean stationarity assumption often substantially improves the finite-sample properties of the resulting estimator. We refer to the GMM estimator using some of the moment conditions implied by the mean stationarity condition as "MS" estimator. This paper addresses four issues related to the large-N and large-T properties of the MS estimators are consistent and asymptotically normal even if data are not mean stationary. The second is whether use of the MS moment conditions leads to a substantial efficiency gain. The third issue is how we would test the mean stationarity hypothesis, especially when data are generated by nearly unit root processes. The fourth is how the MS estimators can be used to test unit roots.

KAEA Workshop (I)

Organized by Yoosoon Chang, Indiana University, email: yoosoon@indiana.edu

Friday, January 5th, 4:00 PM - 6:00 PM (Marriott Philadelphia Downtown, Meeting Room 501)

- Session title: Topics in Macroeconomics with Heterogeneous Agents
- JEL codes: D31, E6, G12, I18
- 1. Presenter: **Hye Mi You**, Hanyang University; email: hyemiyou@hanyang.ac.kr

Title of paper: "Rising Earnings Risk and Wealth Distribution with Housing"

- Coauthors: Byoung Hoon Seok (Ewha Woman's University, email: <u>bhseok@ewha.ac.kr</u>) and Lini Zhang (Central University of Finance and Economics, email: <u>zhang.827@osu.edu</u>)
- This paper studies changing wealth compositions in response to rising Abstract: earnings risk, with a focus on the role of housing assets, in the U.S. between 1983 and 1995. Using the data from the Survey of Consumer Finances (SCF), we document that housing inequality changed little with a stable aggregate homeownership rate for the period. However, among poorer households, both homeownership rates and housing to wealth ratio increased significantly for the period. In order to explain these changes, we build a general equilibrium incomplete-markets model, where households subject to idiosyncratic earnings risk make portfolio choice between housing and a financial asset. As earnings risk rises, households tend to substitute illiquid housing towards liquid financial assets. However, declines in down-payment requirements or housing transaction costs may dampen the effect. The model also has welfare implications: increasing housing wealth and home ownership rates for poorer households improves aggregate welfare, but the reduction of welfare due to rising earnings risk dominates this effect.
- 2. Presenter: Soojin Kim, Purdue University; email: soojink@purdue.edu

Title of paper: "Social Insurance Program Design for the Disabled in an Equilibrium Model"

Coauthors: Naoki Aizawa (University of Wisconsin-Madison and University of Minnesota, email: <u>naizawa@wisc.edu</u>), and Serena Rhee (University of Hawaii at Manoa and RAND, email: <u>rhees@hawaii.edu</u>)

- Many countries implement both public disability insurance program (e.g., Abstract: Social Security Disability Insurance) and employment protection policies (e.g., Americans with Disabilities Act) for disabled workers. We investigate the optimal combination of disability insurance and employment protection, accounting for both the worker- and firm-side responses to the policies. We first provide empirical evidence that firm's provisions of accommodations to the disabled are responsive to firm subsidies. Then, we develop a labor market model where firms post contracts with wage and accommodation; and workers with different levels of disability make labor supply decisions. We estimate the model using the Health and Retirement Survey data, and identify the key parameters exploiting the policy variations for the disabled. Using the estimated model, we quantify the policy impacts on the workers' incentives and the firms' employment contract design. Then, we characterize the optimal mix of the two policy interventions and study their implications on equilibrium labor market outcomes for workers of different health statuses.
- 3. Presenter: **Serena Rhee**, University of Hawaii at Manoa and RAND, email: rhees@hawaii.edu

Title of paper: "Disability Insurance: A Safety Net for the Unhealthy and Its Consequences on the Healthy"

Coauthors: Soojin Kim (Purdue University, email: soojink@purdue.edu)

- Abstract: We study the implication of Disability Insurance (DI) in the context of the aging population. The DI program encourages disabled mid-aged workers to leave the labor markets, shifting the relative demographic composition of the labor force. As different age groups serve as imperfect substitutes to each other, the early retirement of mid-aged workers influences the labor force participation of the young as well. We quantify the aggregate implication of these compositional changes and find that the DI program reduces the labor force participation of both young (1.4%) and old workers (3%), which results in a loss of output approximately two times larger than the estimate based on partial equilibrium analysis.
- 4. Presenter: Yoosoon Chang, Indiana University, email: yoosoon@indiana.edu

Title of paper: "Estimating Heterogeneity in Recursive Preferences"

Coauthors: Berg Cui (Indiana University, email: cuim@indiana.edu) Hwagyun Hagen Kim (Texas A&M University, email: hagenkim@tamu.edu), and Joon Park (Indiana University and Sungkyunkwan University, email: joon@indiana.edu). Abstract: In this paper, we quantitatively study the degrees of heterogeneity in recursive preferences. To this end, we use Euler equations based on Epstein-Zin-Weil preferences and a panel data set from Panel Study of Income Dynamics. We estimate preference parameters such as risk aversion and the elasticity of intertemporal substitution for various groups of individual households defined by socioeconomic status and backgrounds. In addition, we use formal statistical tests to identify core groups of heterogeneous agents in analyzing key economic issues such as consumption and income inequalities, impacts of market incompleteness, and interactions of households with financial markets and asset prices. Our study not only sheds light on the economic implications of heterogeneous agent models, but also offers some guidelines on modeling heterogeneous agents in economic theories.

KAEA Workshop (II)

Organized by Kyoo il Kim, Michigan State University, email: kyookim@msu.edu

Sunday, January 7, 12:30 PM - 1:50 PM

(Marriott Philadelphia Downtown, Meeting Room 501)

- Session title: Macroeconomics and Financial Economics
- JEL codes: C12, C15, E12, E32, E58, E61, G01, G11, G23, G28, G31, F12, O32
- Chair information: Jae-Young Kim, Seoul National University, email: jykim017@snu.ac.kr
- 1. Presenter: Soohun Kim, Georgia Institute of Tech; email: soohun.kim@scheller.gatech.edu

Title of paper: "Fund Runs and Market Frictions"

Ccoauthors: Dong-Hyun Ahn (Seoul National University, email: <u>ahnd@snu.ac.kr</u>) and Kyoungwon Seo (Seoul National University, email: <u>seo8240@snu.ac.kr</u>)

- Abstract: We show that a financial crisis can arise even when funding liquidity is sufficiently provided in the market and there is no exogenous shock. The fully endogenous crisis is triggered by the interaction between asset prices and financial market frictions. We identify the conditions for such a crisis in the context of financial sector practices: (i) redemption of investors, (ii) performance-based fee for fund managers and (iii) margin requirements in funding markets. Our model provides novel insights into the unintended consequences of government intervention in financial markets.
- 2. Presenter: Yunjong Eo, University of Sydney; email: yunjongeo@gmail.com

Title of paper: "The Role of Inflation Target Adjustment in Stabilization Policy"

Coauthors: Denny Lie (University of Sydney, email: <u>denny.lie@sydney.edu.au</u>)

Abstract: We study optimal monetary policy in a New Keynesian model in which the monetary authority faces a trade-off between inflation and output-gap stabilization due to cost-push shocks. In particular, we highlight the role of the inflation target adjustment in stabilization policy by showing that it can mitigate this policy trade-off and considerably improve welfare. The main findings can be summarized as follows. First, we find that the welfare cost of a standard Taylor rule is non-trivial, even with optimized policy coefficients. Second, we propose an additional policy tool of a medium-run inflation target (MRIT) rule. When combined with the standard Taylor rule, the optimal MRIT significantly reduces fluctuations in inflation originating from the cost-push shocks and results in a similar level of welfare to that associated with the Ramsey optimal policy. Third, the optimal MRIT needs to be adjusted in a persistent manner and in the opposite direction to the realization of a cost-push shock. Fourth, the welfare implication of the MRIT is more pronounced under a flatter Phillips curve. Finally, the main findings are relevant to the current economic environment of low inflation rates under a flat Phillips curve, implying that the monetary authority should increase the inflation target in such an environment.

3. Presenter: JaeBin Ahn, International Monetary Fund; email: JAhn@imf.org

Title of paper: "Innovation and Corporate Cash Holding in the Era of Globalization"

Coauthors: Konrad Adler (Toulouse School of Economics, <u>konrad.adler@tse-fr.eu</u>) and Mai Chi Dao (International Monetary Fund, <u>mdao@imf.org</u>)

Abstract: We document a broad-based trend in rising cash holding of firms across major industrialized countries over the last two decades, a trend that is most pronounced for firms engaged strongly in R&D activities. Our contributions to the literature are twofold. First, we develop a simple model that brings together the insights from modern trade theory (Melitz, 2003) with those of contract theory in corporate finance (Holström and Tirole, 1998) to show that increased openness to trade can raise the returns to innovation and the demand for cash holding as firms insure against liquidity shocks subject to moral hazard. Second, we derive sharp empirical predictions and find supporting evidence for them using firmlevel data across major G7 countries during 1995-2014, a period that saw an unprecedented rise in globalization and technological innovation.

4. Presenter: Jeong Ho (John) Kim, Emory University; email: jeong-ho.john.kim@emory.edu

Title of paper: "Beta Anomaly and Mutual Fund Performance"

Coauthors: Jue Ren (Texas Christian University, jue.ren@tcu.edu)

Abstract: We argue that fund performance cannot be measured by its alpha if passive portfolios have nonzero alphas, as is found empirically for equities. For instance, high beta is associated with low alpha. Therefore, higher alpha of a mutual fund indicates greater ability, or lower exposure to the market. We propose that the active alpha of a fund can be measured by the alpha of a strategy that holds the active fund, and that shorts a passive portfolio matched with it on the basis of the market beta. We find empirically that high beta is associated with low alpha for actively managed US equity funds too, but high beta is associated with high active alpha. The empirical finding is robust to controlling for other predictors of performance.

KAEA Workshop (III)

Organized by Kyoo il Kim, Michigan State University, email: kyookim@msu.edu

Sunday, January 7, 2:00 PM - 3:20 PM

(Marriott Philadelphia Downtown, Meeting Room 501)

- Session title: Applied Microeconomics
- JEL codes: D47, G10, G11, H55, I12, I14, I18, I21, I23, I24, I30
- Chair information: Soohyung Lee, Sogang University, email: <u>soohlee@gmail.com</u>

1. Presenter: Hyuncheol Bryant Kim, Cornell University; email: hk788@cornell.edu

Title of paper: "Knowing is Not Half the Battle: Impacts of Information from the National Health Screening Program in Korea"

Coauthors: Suejin A. Lee (Cornell University, <u>sal278@cornell.edu</u>) and Wlifredo Lim (Mathematica Policy Research, <u>wlim@mathematica-mpr.com</u>)

- Abstract: Health screening provides information on disease risk and diagnosis, but whether this promotes health is unclear. We estimate the impacts of Korea's National Health Screening Program by applying a regression discontinuity design around different biomarker thresholds of diabetes, obesity, and hyperlipidemia risk using administrative data that includes medical claims, biomarkers, and behavioral surveys over four years after screening. Generally, we find limited responses to information. However, we find evidence for increased medication and weight loss around the high risk threshold for diabetes, where information is combined with prompting for a secondary examination that consists of confirmatory tests and physician counseling.
- 2. Presenter: Miyoun Paek, University of Cincinnati; email: paekmn@uc.edu

Title of paper: "Outsourcing Equity Funds and Reputation Benefits: The Korean National Pension Fund"

Coauthors: Yong H. Kim (University of Cincinnati, <u>kimyh@uc.edu</u>) and Kwangsoo Ko (Pusan National University, <u>kks1201@pnu.edu</u>)

Abstract: The National Pension Service Investment Management (NPSIM) is the single largest institutional investor in Korea, and it manages the fourth largest pension fund in the world. The NPSIM outsources the management of its portfolios to fund management companies. Half of its domestic

equity portfolios are run by external subcontractors who engage in the business of investment advisory services and mutual fund management. In this study, we examine the effects of high-powered incentives (Holmstrom, 1999) on the management of the outsourced equity National Pension Funds (NPFs) to analyze the differences in performance between the outsourced equity NPFs and public equity funds from the perspective of the agency problem. Empirical results are summarized as follows. First, the outsourced equity NPFs earn higher benchmark adjusted returns than public equity funds despite the fact that outsourcing service fees are significantly lower than the total fees of public equity funds. This indicates that portfolio management of the outsourced equity NPFs is appropriate. However, it also underscores the possibility of agency problems attributable to a monopolistic status of the NPSIM. Secondly, determinants of observed performance gaps between the outsourced equity NPFs and public equity funds are different depending on the types of fund management companies and the relative size of the outsourced equity NPFs. The larger the outsourced equity NPFs are to their public equity funds, proportionally, the better their performance in comparison with public equity funds in asset management companies. This may be related to wealth-transfer within the asset management company (Chen et al., 2013; Chuprinin et al., 2015). That is, the asset management company with larger public equity funds could benefit more advantageous wealthtransfer effect. A larger performance gaps between the outsourced equity NPFs and the in-house equity fund in the same asset management company would be an evidence of wealth-transfer. However, the portion of the outsourced equity NPFs is not a meaningful determinant of performance gaps in investment advisory companies. The investment advisory companies showed more sensitivity to outsourcing services fees, relative to the asset management companies, because the sizeable and regular fee-related income is the source of major incentives. Finally, outsourced pension funds are superior to the public equity funds even considering the characteristics of funds and total fees. This difference can be explained by the agency problem using the reputation hypothesis and high-powered incentives. Our study makes several contributions to the literature of mutual funds and the public pension system. First, this is the first paper to analyze the outsourced equity NPFs from the viewpoint of agency problems. The importance of the pension system is pronounced around the world due to the rapidly aging population and increasing costs. Second, low-powered incentives and high-powered incentives vary depending on the circumstances of the financial market. We find the evidence that "a big fish in a small pond" is sensitive to high-powered incentives. This finding contributes to the literature on both public pension systems and outsourcing contracts in financial markets. Finally, we underscore the importance of the NPSIM's role in the fund industry. The empirical results help establish and improve the efficient incentive structure and proper monitoring processes in outsourcing contracts.

3. Presenter: Young-Joo Kim, Hongik University; email: <u>yjkim.lucia@gmail.com</u>

Title of paper: "The Lasting Effect of Education on Health: The Case of Obesity in the UK and US"

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- Abstract: We examine the determinants of obesity in middle age, with particular attention to the possibility of a link with educational attainment. Using two longitudinal data sets from the UK and US, we estimate the schooling effect on the mean and quartiles of the conditional distribution for Body Mass Index (BMI), the primary measure of obesity. Conditioning on childhood BMI and other characteristics of childhood, we confirm an educational gradient, establish that this is not a disguised income gradient and show that the educational gradient is steeper for the upper quantiles of the BMI distribution, where obesity is indicated. The findings are robust across the analyses of the UK and US data.
- 4. Presenter: Soohyung Lee, Sogang University; email: soohlee@gmail.com

Title of paper: "Endogenous Market Formation: Theory and Evidence from Chilean College Admissions"

Coauthors: Ricardo Espinoza (U of Maryland, <u>Espinoza@econ.umd.edu</u>) and Hector Lopez (U of Maryland, <u>hlopezcarbajal@gmail.com</u>)

Abstract: Policy makers around the world have adopted market-design-inspired centralized matching systems for assigning students to public schools. However, the question of whether policy intervention is necessary for such adoptions has been little studied. Examining a setting with application costs and heterogeneity in college quality, we show that sizable application costs and small heterogeneity in college quality may lead to voluntary transition to a centralized matching system. Using the 2012 system change in Chile, we demonstrate the plausibility of our theoretical setting and show that the enlarged pool of colleges in the centralized admission is welfare-improving, particularly for those students facing high application costs.