TITLES & ABSTRACTS

"Advanced Macroeconomics, Econometrics and Financial Economics: Theory, Methods and Applications"

CHINESE ECONOMISTS SOCIETY (CES) 2019 NORTH AMERICA CONFERENCE

APRIL 6-7, 2019

Department of Economics, University of Kansas

The Title and Abstract of Presentation for CES Conference at KU

Barnett, Bill, University of Kansas

Bifurcation of Macroeconometric Models and Robustness of Dynamical Inferences

Abstract: In systems theory, it is well known that the parameter spaces of dynamical systems are stratified into bifurcation regions, with each supporting a different dynamical solution regime. Some can be stable, with different characteristics, such as monotonic stability, periodic damped stability, or multiperiodic damped stability, and some can be unstable, with different characteristics, such as periodic, multiperiodic, or chaotic unstable dynamics. But in general, the existence of bifurcation boundaries is normal and should be expected from most dynamical systems, whether linear or nonlinear. Bifurcation boundaries in parameter space are not evidence of model defect.

While existence of such bifurcation boundaries is well known in economic theory, econometricians using macroeconometric models rarely take bifurcation into consideration, when producing policy simulations from macroeconometrics models. Such models are routinely simulated only at the point estimates of the models' parameters. Barnett and He (1999) explored bifurcation stratification of Bergstrom and Wymer's (1976) continuous time UK macroeconometric model. Bifurcation boundaries intersected the confidence region of the model's parameter estimates. Since then, Barnett and his coauthors have been conducting similar studies of many other newer macroeconometric models spanning all basic categories of those models. So far, they have not found a single case in which the model's parameter space was not subject to bifurcation stratification. In most cases, the confidence region of the parameter estimates was intersected by some of those bifurcation boundaries. The most fundamental implication of this research is that policy simulations with macroeconometric models should be conducted at multiple settings of the parameters within the confidence region. While this result would be as expected by systems theorists, the result contradicts the normal procedure in macroeconometrics of conducting policy simulations solely at the point estimates of the parameters.

This survey provides an overview of the classes of macroeconometric models for which these experiments have so far been run and emphasizes the implications for lack of robustness of conventional dynamical inferences from macroeconometric policy simulations. By making this detailed survey of past bifurcation experiments available, we hope to encourage and facilitate further research on this problem with other models and to emphasize the need for simulations at various points within the confidence regions of macroeconometric models, rather than at only point estimates.

Chen, Xiaohong, Yale University

On Rate-Adaptive, Minimax Estimation of Quadratic Functionals, and Rate-

Adaptive Minimax Testing in Nonparametric Instrumental Variables Models

Abstract: A nonparametric instrumental variables (NPIV) model is widely used in consumer demand and IO demand that allow for endogenous regressors enter unspecified structural functions. The NPIV model is a leading example of linear ill-posed inverse problems in function space. Some economic policy and welfare parameters are nonlinear functionals of the NPIV structural function. There is no published results on minimax rate-optimal estimation of irregular nonlinear functionals of the NPIV function. This paper first considers rate-adaptive minimax estimation of quadratic functionals of a NPIV structural function. In particular, we propose a leave-one-out, sieve NPIV estimator of the quadratic functional and show that its convergence rate coincides with the lower bound. We then propose a data-driven procedure that is rate-adaptive to the unknown smoothness of the NPIV function and the unknown degree of ill-posedness. The minimax optimal estimation of a quadratic functional of the NPIV function inspires us to establish the minimax optimal testing: we show that the first type error and the maximal second type error, uniformly over a Sobolev class of NPIV functions, becomes sufficiently small and cannot be improved by any other test. Simulations and empirical illustration are provided to demonstrate the finite sample performance of the new test.

Hsiao, Cheng, University of Southern California

Panel Parametric, Semi-parametric and Nonparametric Methods of Constructing Counterfactuals

Abstract: We consider panel parametric, semi-parametric and nonparametric methods of constructing counterfactuals. We show through extensive simulations that no method is able to dominate other methods in all circumstances. Since the true data generating process is typically unknown, we therefore also suggest a model averaging method as a robust method to generate counterfactuals. As an illustration of the sensitivity of counterfactual construction, we re-examine the impact of California's Tobacco Control Program on per capita cigarette consumption and election day registration (EDR) laws on voters' turnout by different methods.

Hausman, Jerry, MIT

Specification Test on Mixed Logit Models

Abstract: This paper proposes a specification test of the mixed logit models, by generalizing Hausman and McFadden's (1984) test. We generalize the test even further by considering a model developed by Berry, Levinsohn and Pakes (1995).

Zhou, Guofu, Washington University,

Big Data: What is the Impact on Stocks, Bonds, Commodities and Bitcoin?

Abstract: The presentation provides an overall view of big data applications in finance, with a focus on some selected works in the area. The talk discussed various big data sets and machine learning methods as applied to stocks, bonds, commodities and Bitcoin. The empirical results show substantial statistical and economic gains with the availability of big data and with the use of machine learning methods.

Ahmed, Fawad, Wuhan University of Technology

A Study on the Social Impact and Risk Indicators of CPEC Associated with Environmental and Cultural differences between Pakistan and China

Abstract: China-Pakistan Economic Corridor with a proposed infrastructure from Gwadar to Kashghar and the other parallel projects would not only augment the Pakistan's industrial sector but also create a lot of employment opportunities. The CPEC is mainly focused on overland transportation channel development and pipeline links from Gwadar port to the Chinese province of Xinjiang. Thus, this study shall cover the whole of Pakistan region involved in CPEC route. China-Pakistan Economic Corridor (CPEC) gained unprecedented interest in year 2015 when agreements worth 46 billion USD were signed and within the next two years increased to 62 billion USD. Often termed as the "life-line" the project mainly focus on energy and infrastructure of Pakistan and the improvement of these sectors will serve as a driving source for Pakistan's economy China Pakistan Economic Corridor is treated as the game changer in South Asian region, and it is because of Pakistan China long lasting friendship of 65 years. Also, this relationship has reaped many economic benefits as well, that the trade volume between two countries has reached in $100 billion from $5.7 billion. Social risks were potentially identified which need to be addressed for proper implementation of projects along the CPEC curve. This paper attempts to ascertain the indicators related to social impact and the risks associated. It not only addresses the impacts of the projects, but also the impacts on the projects in order to establish risk indicators through the literature review as well as practical international standards. Data were collected from 8 major cities along the CPEC route. Using an analytic hierarchy process (AHP) and average value to analyze questionnaires, we identify the importance of various risk indicators. Initially pooled indicators were Technological risks, Cultural difference, Economics, Politics, Noise, Biodiversity, Soil, air pollution, water pollution. Out of these, Individual risks and the noise risks were categorized as medium risk category while all others were high risk indicators. It is evident from results that Chinese enterprises must adopt a development strategy of strengthening and capacity building and establish enterprises capable of addressing environmental and social issues during the investment process. At the same time, Pakistani Government needs to strengthen the security and law and order situation to protect the projects against external threats.

Bhutta, Umair Saeed, Wuhan University of Technology

Impact of Belt and Road on Trade cost, Multilateral Trade and Economic Growth of Economies.

Abstract: Belt and Road (OBOR) economic growth model is launched by Chinese President Xi

Jiping in 2013. Main motive of this program is to increase transport connections with to grow the international trade and economic growth of economies. Building trade routes via road, rail and sea and infrastructure projects across Asia and Europe are the key parts of OBOR which constitutes six economic corridors and it has the potential to be the largest development project in modern history. This article will investigate the potential impacts of OBOR on trade cost, multilateral trade and economic growth of the countries. From South-east Asia to Eastern Europe and Africa, BRI includes 71 countries that account for half the world's population and a quarter of global GDP. OBOR economies are increasingly integrated with each other and with the rest of the world and the exports from these countries has increasing trend with China as the major exporter. Trade between OBOR countries and from OBOR to rest of the world is costly due to poor infrastructure, bad trade facilities and due to governance. OBOR nations use to export raw material to many developed countries. Many countries in OBOR are under developed and have poor infrastructure, because of these poor facilities they are not able to utilize their potential resources at maximum. Most of trade now a day is done through sea routes and building sea ports is one of the major projects under OBOR initiative. By building ports and strong transport and infrastructure system will help these countries to minimize trade cost by reducing shipment time and making those trade flows easier. This will have large potential impact on economic growth of OBOR countries and rest of the world. It is said that transport and trade facilitation can change trade costs of countries significantly because transport cost is one of the major portions of trade cost. Through this research we will check how building ports and other infrastructure facilities will help reduce trade cost. As the trade cost decreases the trade between OBOR countries and rest of the world will increase. The WTO has calculated that improvement in trade and transportation facilities help to reduce OBOR countries trade cost by 12% and to 23%. Increasing trade will result in increased economic activities and that in turn will help achieve economic growth and prosperity for particularly for OBOR countries and rest of the world in general.

Cao, Yu, University of Southern California

Innovation, Ownership Structure and Growth

Abstract: This paper investigates the relationship between firm ownership and the quality/type of innovations based on a combined dataset of Chinese manufacturing firms and its patenting activity. Different from previous literature on Chinese patent data, this paper measures the quality of innovation by newly constructed citation data from China National Intellectual Property administration. In contrast to other literature, this paper allows firms not only choose the quality of innovation, but also types of innovation (invention, design or utility). My empirical result shows that once controlling for firm size, age, R&D productivity and other firm heterogeneity, state-owned firms are more likely to innovate in high quality invention patents (those with more citations), whereas private firms are more likely innovating in patents characterized as "design" and "utility". On average, the patent invented by a state-owned firm receives 4.4 more citations than the patent invented by a private firm. I also use a difference-in-difference method to find considerable heterogeneity in the effectiveness of China's R&D tax reform in 2008: tax incentive significantly increases granted invention patents in state-owned firm only, whereas it significantly increases granted design and utility patents in private firm only. For state-owned firms which receive tax benefits would significantly increase its patent application in invention (average treatment effect is 1.56 patents per year) and patent quality is also largely increased (for granted

patents, the average treatment effect is 1.26 citations per patent per year). Next, I build a stylized endogenous growth model with two types of firms (state-owned and private) to further explore those empirical results. Finally, I use these estimated parameters to conduct a macro policy experiment to evaluate the effectiveness of R&D tax deduction. The results showed that the existence of tax evasion behavior hampered the effectiveness of tax incentive policies in private firms. In contrast to state-owned, private firms which face less government monitoring would utilize such policies as tax evasion tools and find it more profitable to innovate on low-quality patents such as design and utility. In conclusion, providing tax incentives to state-owned firm would be more efficient in stimulating economic growth.

Chauvet, Marcelle, University of California, Riverside

VOILatility: Forecasting Oil Prices under Uncertainty

Abstract: Historically, oil prices are subject to sudden jumps as well as smoother changes due to changes in supply and demand. Although linear models may capture some of the dynamics in between the jumps in-sample, they fail to represent and predict nonlinearities underlying the market out-of-sample, real time. Some of the abrupt changes in oil price dynamics were due to OPEC decisions in the 1970s-1980s. Recent developments such as shifts to new technology or cooperation of Russia and OPEC can potential engender new structural breaks in the oil market dynamics, with the possibility of markedly different results in out of sample real time forecasts. Models and methods that take into account instability/breaks might substantially improve forecasts. Nonlinear models reveal additional information compared to frameworks that take into account only average linear effect of one series on another. This paper proposes a model specifically designed to forecast oil prices taking into account potential nonlinearities and non-stationarities. The autoregressive multivariate mixed frequency model has probabilities of structural breaks in the mean and volatility of oil price as a function of several variables including: indicators of potential sudden changes in oil supply/price (news on OPEC, Russia's oil policy and changes in inventories), indicator of economywide demand and oil consumption in the largest consumers and importers of oil, indicator of recent technology shifts, indicator of changes in risk. Preliminary results indicate that the model provides accurate real-time forecast of oil price remarkably superior to forecasts from alternative linear frameworks.

Chen, Cheng, Shanghai University of Finance and Economics

Dust Storms and Birth Outcomes: Evidence from Taiwan

Abstract: A major hindrance in identifying health impacts of air pollution is the lack of variation in pollution exposure (measured at each local area) that is driven by factors unrelated to the local conditions affecting health outcomes such as the local economy and access to health care. In Taiwan we observe one unique source of exogenous variation in the local pollution, which is the presence of northeasterly winds (occurring mainly during winter months) that can transport pollutants originating from Mainland China to Taiwan. Our study focuses on infant outcomes in Taipei city, in order to utilize its special and complex terrain that consists of Taiwan's second largest basin and its surrounding mountains, including the Yangming Mountains to the north, the Linkou

Mesa to the west, and the Snow Mountains to the southeast. It takes longer time for pollution to vanish in the basin areas. Automobiles are the only local source of ambient air pollution in Taipei city. It is important to point out that as the chemical composition of PM due to dust storm and automobile can be different, their impact on infant health can be different too. Thus, it is import to distinguish the source of PM. The air quality monitoring station at Yangming Mountain (826 m in altitude) is ideal to reflect the increase in PM_{10} in Taipei city due to dust storms, because it is near the northern tip of Taiwan (the dust storm is associated with northeasterly winds) and is also the highest point around the basin. In addition, the Yangming Mountains to the north of Taipei city have almost no local pollution but its pollution level increases sharply during dust storms. Based on Liu and Shiu (2001)'s calculation, Asian dust storm add 12% to the total PM_{10} at the Yangming station on the yearly basis from 1993--2000, and this number can be as large as 120% in the month of April. Our primary results suggest that in utero exposure to PM_{10} is associated with lower birth weight, and increases the risk of low birth weight (LBW), preterm, and full-term low birth weight (FTLBW), but have not impact on the risk of very low birth weight (VLBW). Additionally, the impact of in utero PM_{10} exposure on LBW is larger for female infants and infants of high educated or old mothers.

Chen, Yongjun, Renmin University of China

The Bonus of "the Belt and Road" Through Openness and Cooperation

Abstract: "The Belt and Road" initiative has a mutually beneficial and win-win inherent economic bonus which needs to be applied through the practices of openness and cooperation, so that all the participants can share the benefits. This article firstly, analyzes the background of the economic nature of the bonus that "the Belt and Road" initiative produces, secondly, describes the win-win mechanism and "Belt and Road" bonus before thirdly, providing a theoretical basis for understanding how to achieve "the Belt and Road" bonus by the practices of opening up and cooperating.

Chen, Zhuo, University of Georgia

Chinese Economists: Demographics, Pay, and Time Use

Abstract: We conduct a survey of members of the Chinese Economists Society during January – March, 2019. The survey aims to assess the current research and academic life about Chinese economists and to provide anonymized summary feedbacks to the CES leadership and the public including (1) the distribution of age, geographic, and seniority; (2) participation of the CES activities; (3) perceived needs in professional development and mentoring among the CES membership. We also plan to address research questions including: (1) how pay is related to seniority, gender, affiliation, fields, and overseas experience among Chinese economists; (2) time use across different career stages among Chinese economists. We will stratify by place of work and career stage, as well as gender. Preliminary results and their implications will be discussed without any identifying information.

Chen, Haiqiang, Xiamen University

A New Approach to Test Predictability in Quantile Regression with Persistent Predictors

Abstract: This paper aims to solve the problems caused by persistent predictors in predictive quantile regression and provide a robust inference theory across different persistence categories to perform the testing on predictability. There are mainly three issues focused by related literatures. First, the asymptotic distribution of traditional test statistics contains nuisance parameters which represents the persistence and could not be estimated consistently. Second, the embedded endogeneity due to the contemporary correlation between innovations of predictive regression and the predictors make it impossible to construct the pivotal test statistics by self-normalization. Third, empirical researchers often falsely adopt the traditional test statistics since it is very likely for us to wrongly judge the non-stationary predictor as stationary one. All issues make the traditional test statistics invalid. To overcome these obstacles, we construct a weighted estimator based on variable addition approach (Breitung and Demetrescu, 2015) and adopt a new additional variable. Our consistent test statistics reach the local power under the optimal rate T with non-stationary predictors and T with stationary predictors respectively. So unlike literatures, it avoids the loss of power with all persistence. Power and size performance of the proposed statistics are compared with other existing methods such as IVX-QR (Lee, 2016) in simulation studies. The predictability of US stock returns is revisited by our approach at different quantile levels.

Cheng, Shiyu, University of Kentucky

High Speed Rail and College Choice

Abstract: When making college choices, high school graduates and their families usually prefer schools with higher quality and shorter distance. Since 2007, the construction of high-speed rail (HSR) network in China has reduced the transportation cost dramatically. This paper uses the college admission score to reveal students' preference of colleges. Due to the expansion of HSR, universities in neighbor provinces with HSR connection become more popular than those universities in neighbor provinces without HSR connection, whose admission score relatively increase by 6 points. The score for better-quality out-province universities increases more. These findings imply that the decline in transportation cost (weakly) increases homogeneity in ability of the students within universities.

Ding Xiaozhou, University of Kentucky

Impact of College Education on Migration in China

Abstract: In this paper, I examine the causal effect of education on migration using the Chinese Cultural Revolution as an exogenous shock to college education. Theory supports the idea that there exists a positive relationship between education and migration. However empirically it suffers self-selection bias and education attainment itself is also correlated with other omitted variables. Tertiary education was suspended during the Cultural Revolution era, but restored after

1978, which affected only a certain group of people within a short period of time. I use the exposure to Cultural Revolution as an instrument to education for a specific age cohort to examine the causal relationship between college education and migration pattern in China. 2SLS estimates suggest that college significantly increased the likelihood that people resided outside their birth provinces and large in magnitudes.

Doh, Taeyoung, Federal Reserve Bank of Kansas City

Cash Flow and Risk Premium Dynamics in an Equilibrium Asset Pricing Model with Recursive Preferences

Abstract: Under linear approximations for asset prices and the assumption of independence between expected consumption growth and time-varying volatility, long-run risks models imply constant market prices of risks and often generate counterfactual results about asset return and cash ow predictability. We develop and estimate a nonlinear equilibrium asset pricing model with recursive preferences and a flexible econometric specification of cash ow processes. While in many long-run risks models time-varying volatility influences only risk premium but not expected cash flows, in our model a common set of risk factors drive both expected cash flow and risk premium dynamics. This feature helps the model to overcome two main criticisms against long-run risk models following Bansal and Yaron (2004): the over-predictability of cash flows by asset prices and the tight relation between time-varying risk premia and growth volatility. Our model extends the approach in Le and Singleton (2010) to a setting with multiple cash flows. We estimate the model using the long-run historical data in the U.S. and find that the model with generalized market prices of risks produces cash ow and return predictability that are more consistent with the data.

El-Shagi, Makram, Henan University

The Role of Measurement in Money Demand Estimation

Abstract: Over the past decades 100s of papers assessing money demand in the leading economies of the globe have been published. Usually those papers make minor changes to some seminal setup and compare the outcome in terms of income elasticity of money demand, interest rate semi-elasticity and - possibly most importantly - stability. The limited number of approaches reported in an individual paper (and the involved selection process) make it hard to assess whether the reported differences are due to peculiarities of the original approach or the newly introduced modification. In this paper, we estimate several 1000 models for China, the Euro Area, the US and the UK to identify the driving forces behind the heterogeneity of results reported in the literature.

Fan, Rui, Rensselaer Polytechnic Institute

Predictive Quantile Regression: Adaptive LASSO Approach

Abstract: This paper studies the benefit of using adaptive LASSO for predictive quantile regression.

The commonly used predictors in predictive quantile regression typically have various degrees of persistence, and exhibit different signal strength in explaining the conditional quantiles of dependent variable. We show that the adaptive LASSO methods have the consistent variable selection and the oracle properties under the presence of stationary, unit root and cointegrated predictors. Some encouraging simulation results are reported.

Fang, Jing, Chongqing University

Impact of Shortened Travel Time Caused by HSR on Urban Economic Growth in China

Abstract: The Horse-Mass Theory refers cities as horses to cross the so-called middle-income trap. High-income cities are regarded as fast-running horses, while low-income cities are regarded as slow-running horses. The theory implies that there are two necessary conditions for China to cross the middle-income trap: (1) fast-running horses continue to run after crossing the trap, and (2) slow-running horses run faster than the fast-running ones. The chains linking fast and slow-running horses include a variety of transportation and communication infrastructures, especially the high-speed railways (HSR). HSR in China is dedicated to passenger transportation only, but its space-time shrinking effect can not only shorten the travel time between cities, but also facilitate faster and more efficient flows of production factors and information. Slow-running horses are more likely to access and gain the technical experiences of the fast-running ones and hence improve their own technological progress. Based on this theory, we introduce an intertemporal difference-in-difference method (intertemporal DID) to analyze the effect of HSR's space-time shrinkage ability at the prefecture-city level in China. We creatively measure this effect by the shortened travel time before and after the operation of HSR during 2007-2016 for all the Chinese prefecture-level cities. Using shortened travel time caused by HSR, instead of a dummy variable HSR as in other studies, we can measure the effects of HSR on economic growth more accurately and avoid the endogeneity problem. Our research results show that the elasticity of economic growth with respect to shortened travel time is 0.4% on average. Both HSR and the horse-mass effects play an important role in the economic growth of the Chinese cities. More importantly, HSR is found to have strengthened the so-called horse-mass effect. Our research findings provide new evidence for the causal effect of HSR to urban economic growth, especially the intermediate effect of the horse-mass effect between cities.

Fang, Ying, Xiamen University

Testing Conditional Unconfoundedness Assumption Using Auxiliary Variables

Abstract: In this paper, we propose an alternative test procedure for testing the conditional independence assumption which is an important identification condition commonly imposed in the literature of program analysis and policy evaluation. We transform the conditional independence test to a nonparametric conditional moment test using an auxiliary variable which is independent of the treatment assignment variable conditional on potential outcomes and observable covariates. The proposed test statistic is shown to have a limiting normal distribution under null hypotheses of conditional independence. Furthermore, the suggested method is shown to be valid under time

series framework and thus the corresponding test statistic and its limiting distribution are also established. Monte Carlo simulations are conducted to examine the finite sample performances of the proposed test statistics. Finally, the proposed test method is applied to test the conditional independence in real examples: the 401(k) participation program and return to college education.

Faraz, Naveed Ahmad, Wuhan University of Technology

Public Perception of China-Pakistan Economic Corridor: A Stakeholder's View

Abstract: This paper aimed to investigate the prospects of China-Pakistan Economic Corridor (CPEC) from a stakeholder's viewpoint. Perception of the stakeholders can play a vibrant role in shaping the future of CPEC. Through a structured survey instrument an exploratory study was conducted to tap the perception of Pakistani stakeholders connected directly or indirectly to the likely benefits of CPEC. Rigorous efforts were carried out to prepare a thorough representative sample from all the quarter. People from all walks of life (Laborers, Businessmen, Employees of the armed forces, Students, Professionals, Parliamentarians, Media Representatives, and Minorities etc.) encompassing entire geography of Pakistan were included in the sample. In total the survey was administered to 735 respondents. The results revealed interesting findings relating to the perception of Pakistani stakeholders about CPEC. Valuable suggestions for the Government of P.R. China and Pakistan are offered regarding use of media and academic institutions to better present CPEC and enhance its positive perception. The study future suggested introducing an inclusive approach to mitigate the negative perception about CPEC. At the end potential limitations of the study and directions for future research are suggested.

Feng, Qidi, Jinan University

Short-Sale Constraints, Pricing Model Efficiency, and Return Co-Movement

Abstract: Stocks without short-sale constraints tend to comove more with other stocks among which short selling is allowed. We examine the effectiveness of factor pricing models via the event of Qualified Securities for Short-sale Refinancing (QSSR) as a Quasi-natural experiment, finding that there is a significant improvement of pricing efficiency after the implementation of QSSR. Meanwhile, due to the divergence of optimistic and pessimistic believes, the stock returns on the QSSR list have a stronger tendency of falling together than stocks out of the list. Furthermore, the difference of informed-trading possibility between the two samples is another explanation for the return volatility discrepancy, which means the stocks on the list have a higher probability of informed trade contrast to the rest.

Gao, Jiaqi, Shaanxi Normal University

Effectiveness of Interventions to Improve Academic Performance in Rural Chinese Primary Schools: A Pooled-Data Analysis From Twelve RCTs

Abstract: Introduction: Primary education plays an important role in developing the skilled labor

and human capital needed in sustainable economies. Despite China's successful efforts in achieving universal primary school education and enrollment, academic performance in rural Chinese primary schools remains poor, creating wide rural-urban education gaps. While various interventions to improve academic outcomes in rural China have been studied, each approach drew upon different fields ranging from education and economics to public health, with no broad consensus on which types of interventions are most effective in improving education outcomes. Methods: This study aims to assess the effectiveness of existing interventions aiming to improve academic performance in rural Chinese primary schools. Only large-scale, multi-school randomized control trials measuring changes in mathematics test scores as an outcome were eligible for inclusion. Our analysis included 20 interventions targeting 37,950 students in 1085 rural Chinese primary schools. These interventions fell into five broad categories: computer assistant learning (CAL), teacher incentive reform, eyesight correction, anemia reduction, and nutrition education. Test scores were scaled into z-scores by subtracting the mean and dividing by the standard deviation of the math score distribution of students. Polled-data analysis method and OLS regressions were used with additional controls for individual and household characteristics and county fixed effects. Results: After pooling the data and re-estimating the regressions, we found that CAL increased standardized math test scores by an average of 0.16 standard deviations. Both teacher incentive reform and eyesight correction increased scores by an average of 0.1 standard deviations, while anemia reduction increased scores by 0.05 standard deviations. Nutrition education was found to have no significant impact on math scores. Moreover, we found that students with better previous academic performance benefited more in all five intervention categories. Male students reported larger math score improvements with CAL, teacher incentive reform, and nutrition education interventions than those of female students. Finally, boarding students improved more in the CAL intervention than non-boarding students. Conclusion: Results suggest that the effectiveness of interventions aiming to improve academic performance varies greatly between categories. CAL was the most effective intervention, while anemia reduction and nutrition education had either small or zero impact on improving students' math performance. Heterogeneous treatment effects by gender, boarding status, and previous math performance were also found. Further studies are needed to analyze the cost-effectiveness of these diverse interventions.

Geng, Huayan, SUNY Binghamton University

Estimation and Inference of Treatment Effects Using a New Panel Data Approach with Application to US SYG Law

Abstract: This paper proposes a new panel data approach to measure the impact of social policy. We consider a classical panel model with interactive fixed effects, which allows the cross-sectional dependence through the presence of some (unobserved) common factors. Compared to the existing methods such as Synthetic Control Method (SCM) (Abadie et al. (2010)) and the Generalized SCM (GSCM) (Xu (2017)), our new approach has the advantages of: (1) there is no need to impose constraints on both observables and unobservables; (2) the number of parameters to be estimated in the model is greatly reduced. Instead of estimating the unobserved factors, we propose to use observed data. Moreover, we also establish the asymptotic results for the average treatment effect (ATE), which can be used to obtain valid inference for the significance of ATE or to construct

confidence band for the treatment effects in the post-treatment periods. Monte Carlo simulations show that our approach works remarkably well and has very desirable finite sample performance in terms of estimation bias, mean square of errors, and empirical rejection frequency. We apply our method to study the effect of US Stand Your Ground (SYG) law on the state-level murder rate, and we find, in general, the SYG has increased the murder rate.

Gong, Guan, Shanghai University of Finance and Economics

Shadow Banking and Economic Transition in China

Abstract: This paper studies the effect of China's shadow banking of non-financial firms on China's economic transition. We extend the economic transition model developed by Song, Storesletten, and Zilibotti (2011) to allow for shadow banking activities in an underdeveloped financial system. The state-controlled firms access to cheap credits from banks while the private firms are severally borrowing constrained. The households cannot lend to the private firms and save the bulk of their savings in the form of bank deposits. We find that shadow banking improves the efficiency of resource allocation, slows down economic transition process, increases market loan interest rate to the private sector, and amplifies the shock of capital price.

Guo, Ye and **Wen, Qiang,** Xiamen University

For Goodwill or Resources? The Rationale behind Chinese Private Firm's Corporate Philanthropy under Economic Policy Uncertainty

Abstract: Corporate philanthropy (CP) is an important business strategy for firms to establish a good public relation, however, little is known about to what extent firms will change their CP behavior as a response to higher economic policy uncertainty (EPU). This paper explores the heterogeneous CP behaviors of private and non-private firms to EPU in China, using Baker et al. (2016)'s EPU index and China's publicly listed firm's database. Interestingly, we find that private firms significantly do more CP than their counterparts in periods with higher EPU. Our findings are robust to different empirical models as well as alternative indicators. Further analysis shows that private firms also take more other corporate social responsibilities when EPU index increases, which implies that private firms may be more altruistic. We also find that private firms selling products directly to consumers do more CP, which indicates that private firms will use CP for advertisement to hedge the EPU's shock. On the other hand, we do not find evidence regarding private firm's excess CP in a higher EPU environment is rewarded with more resources from government or financial institutions, such as loans, subsidies as well as tax cuts. Our findings shed light on the true motivation behind Chinese private firm's excess corporate philanthropy behavior under economic policy uncertainty, is still for a good reputation with their consumers.

Han, Qing, The University of Kansas

Monetary Services Aggregation Theory under Choquet Expectation

Abstract: This paper considers monetary aggregation under uncertainty aversion (perhaps under risk aversion as well). The presence of uncertainty and the agent's attitude towards it are represented by a nonadditive probability measure. The major findings are three-fold: first, the user cost of monetary assets under uncertainty aversion produces useful boundaries. We no longer have covariances, instead, we have inequalities, and our model nests some of the previously derived results. Second, deviating from expected utility does not exclude the existence of a user-cost solution which is analogous to the expected utility representation, but that is only a special case. Third, under Choquet expectation the user costs have an interval within which no trade of monetary assets will occur, such an effect depends solely on uncertainty aversion, not on risk aversion.

Han, Xiao, Purdue University

Is Online Market Pricing Fresh Produce Differently? Evidence from Revealed Data

Abstract: With the popularization of E-commerce, online shopping for fresh produce like vegetables and fruits becomes increasingly active in the world and in China particularly. Compared with traditional retail channels where customers can choose these products based on sensory attributes such as appearance, taste, firmness, etc., online sellers have to present such attribute information with words, pictures or videos and additional information such as customers' reviews and certification to attract consumers. With many more choices and different attribute information faced by customers, the pricing of products online is unique and needs in-depth investigation, because it may affect the entire value chain in the production and processing standards. Existing studies on fresh food online market are rather few. This study is aiming to examine the determination of produce prices by product attributes in a hedonic pricing framework. Specifically, we estimate the implicit price of each product attribute provided online using apple in China as a case, and compare with corresponding results in studies for traditional markets. A hedonic price function relating apple prices and its online attributes will be estimated using data that have been collected via web crawler using Python from Jingdong (JD) E-commerce platform. The panel data have over 2,700 observations each week for four weeks in November and December 2018. Descriptive information has been transformed to variables measuring each important online attribute for apple products including prices, and customer reviews associated with each product are also included. We expect that size, place of origin, branding, variety, safety certification, promotion, and customer review will play important roles in the pricing of apples sold online. We will compare these online attributes' implicit prices with corresponding ones from traditional market studies and identify the differences that can contribute to the understanding of the online market. It is anticipated that place of origin and branding can play a bigger role in online pricing than offline because consumers have more choices online than offline and the online vendors place more emphasis on these two attributes. The consumer review attributes, numerical scores, words, and pictures, are unique to online markets and their impact on price will shed lights on the online market pricing scheme. Results of the study can provide knowledge about this new market to market professionals. Valuable implications can be derived for agribusiness on the food supply chain as they are competing in both markets, online and offline.

Hashmi, Shabir Mohsin, Jinan University

A Global Value Chain Model for World Output Adjustment by Sectors Caused

Abstract: With respect to global vertical specialization, different production stages of the various global value chains are located in different countries throughout the world. Changes in an attendant country's cost of production will affect final product prices and lead to change in demand. This study used a global value chain model to determine the effect of currency appreciation and its resultant impact on different sectors, value chains and world output. By utilizing the WIOD database, we applied the formula to calculate the changes to the value-added by each sector level, given a specified currency appreciation. Our empirical findings reveled that currency appreciation creates an illusion of higher GDP growth when denominated in a foreign currency. However, when denominated in domestic currency, appreciation of the currency put an adverse impact on its own GDP growth. The impact of currency appreciation varies from countries to countries and their respective sectors. Taking the world as a whole, US dollar exchange rate appreciation, drives up global real GDP, while, RMB appreciation leaves a negative impact on the global GDP. Based on the data analysis, we assume that if a country's aggregate demand exceeds its aggregate output, its currency appreciation tends to expand global GDP. Similarly, if a country produces more than what it consumes, its currency appreciation leads to decline in the global GDP. The results confirm that appreciation of the RMB leaves a substantial negative impact on several Chinese sectors and positive impact on the output of other countries' sectors. On the other side, appreciation of the RMB exerts very strong negative impact on the domestic wholesale business, whereas, electronics and computers, agriculture, textile and mining sectors are highly sensitive to RMB appreciation. In case of United States, Japan and South Korea, the impact of currency appreciation is mostly on the manufacturing of computers, electronic and optical products. Likewise, machinery and equipment in Germany are very responsive to currency appreciation. It is concluded that major economies and their neighboring trading partners are strongly affected by the currency appreciation. Appreciation of the RMB has major effects on the U.S, Germany, Japan, and South Korea, while, China, Canada, Germany, and Mexico are mainly affected by a change in the USD exchange rate. Correspondingly, a change in Japanese currency rate exhibits a strong impact on China, USA, Germany and South Korea.

He, Limin, Jinan University

Asymmetric Impacts of Dynamic Rare Disaster Risk on the Stock Market: A Century of Evidence

Abstract: This study provides extended empirical support by investigating the asymmetric effect of dynamic rare disaster risk on the fluctuations of stock market. In particular, using a century of the US stock market data during the period from 1900 to 2015 we characterize its non-linear effect on stock returns as well as the volatility of stock market. Our results show that the US stock market exhibits an asymmetric dependence with rare disaster risk on both returns and volatility. The impact is much more significant when stock returns are extremely high or low. The dynamic relationship between rare disaster risk and stock volatility also varies greatly across different market conditions. In addition, we explore the mechanism of how rare disaster affects the US stock market by linking their relationship to macroeconomic variables and forecasts in the United States.

Hu, Wuyang, Ohio State University

Pareto Improvement on Chinese Crop Insurance Design

Abstract: Debate has continued from 2009 regarding the economic efficiency of the operational principle of "low liability with high premium subsidies" in Chinese agricultural insurance. On the one hand, the Chinese government mandates that heavy subsidies are crucial to maintain a reasonable farmer participation rate, while on the other hand the subsidy budget has grown to become unaffordable to the government. Similar debates over the premium-subsidy policy as well as crop insurance liability have also long existed in developed countries such as the U.S. Understanding farmers' preferences for crop insurance attributes is crucial in designing better insurance products and guiding government policies but such research is lacking, particularly in developing countries. Using national survey data collected in 2015 featuring a discrete choice experiment, this study identifies significant influences of product attributes on Chinese farmers' paddy rice insurance decisions. This is one of the very few studies that analyze farmers' preferences and willingness to pay for the attributes of crop insurance products, not just the overall demand. Findings of this debate has policy implications on whether and how the government should organize the liability and subsidy structure, given the limited total subsidy budget. Overall, our findings reveal that there was significant heterogeneity in farmers' preferences based on their socio-economic characteristics as well as the level of risks they faced. The current single-product market structure using "low liability with high premium subsidies" cannot accommodate the diverse needs among farmers. Providing more varieties of liability-subsidy combinations, e.g. a high liability with low premium subsidy insurance product, can substantially improve participants' welfare with little impact on the probability of participation. Policy simulation confirms the pivotal roles of liability in strengthening insurance participants' welfare and premium subsidy in encouraging participation. In a market with a single insurance product, potential Pareto improvement can hardly be achieved due to the trade-offs between participants' welfare and participation rate given the government's limited fiscal resources for premium subsidy. The simulation results indicate that adding one single product can lead to increases in both aggregated social welfare and participation while maintaining the current level of government expense in subsidy -- a potential Pareto improvement. In the context of a fast-developing crop insurance market, our study shows how crop insurance product design can build upon farmers' choices to achieve a potential Pareto improvement in aggregated social welfare.

Huang, Bin, Renmin University of China

The Influence of Rural Tourism on Agricultural Socialization Service from the Perspective of Industrial Convergence: Evidence from the Village-Level Data of the 3rd Agricultural Census in Beijing

Abstract: Based on the definition of industrial convergence, this paper divides the industrial convergence into outward-oriented convergence and endogenous convergence. Further, this paper regards the "star industry" rural tourism as a typical example of outward-oriented convergence to explore its impact on the agricultural socialization service, the "typical industry" of endogenous convergence. Based on the village-level data of the 3rd agricultural census in Beijing, this paper

try to examine the influence of rural tourism on agricultural socialization service. In order to avoid the endogenous problems, this paper also uses instrumental variable, the average level of rural tourism income of other village in the same district, for regression. To testify the concrete connection between rural tourism and agricultural socialization service, this paper uses Mediation Effect to measure how factor endowment play its role and how much influence contributed by land, labor and capital elements respectively. The results show two conclusions. First, the outward-oriented convergence has a significant positive impact on endogenous convergence. The increase in rural tourism income is conducive to the improvement of agricultural socialization service. Second, factor endowment is the positive intermediate path in the process of outward-oriented convergence affecting endogenous convergence. Among them, the mediating effect of labor factor and capital factor is significantly positive, while land element is not significant. The conclusions contain the following policy inspirations. On one hand, we should pay attention to the combination of new business development in new rural industries and the perfection of agricultural socialized service system, playing the role of outward-oriented convergence in the convergence of endogenous integration. On the other hand, advancing the modernization of agriculture and rural areas should firmly grasp the "bovine nose", establishing and improving a two-way flow system for urban and rural factor endowments.

Huang, Weihuan, University of Kansas

Inferences for Varying-Coefficients Forward-Backward Diffusion Models

Abstract: This paper studies forward-backward stochastic differential equation models in continuous time setting with nonstationary time series data, allowing also for stationary data. A time-varying coefficients forward-backward diffusion model is considered, kernel estimations of the coefficients are obtained, and large sample theory of the coefficients are deduced by borrowing the method in Phillips et al. (2017). A functional-generator backward diffusion model is also considered, kernel estimations of the functional generators are obtained, and asymptotic behavior of the generator is deduced by borrowing the method in Cai et al. (2009). As applications in finance, one can identify the Black-Scholes model and the Chen-Epstein model by the time-varying backward diffusion models, and identify linearity of generator and the stochastic differential utility by the functional-generator backward diffusion models. Empirical analyses will be shown in Cai and Huang (2019a).

Huang, Zhilin, University of Kansas

Do Exports Contribute to Economic Growth along Belt and Road Countries? Evidence based on Panel Data Error Correction Model with Cross-sectional Dependence

Abstract: By adopting Panel Error Correction Model with Cross-sectional Dependence, our paper addresses cross-sectional dependence problem that has been ignored in most regional studies, and investigates both long-run and short-run relationship between exports and economic growth in 54 Belt and Road Countries over the period of 1995-2017. Panel unit root test suggests that both exports and economic growth are integrated of order one. Panel co-integration test confirms that a

long-run and steady co-integration relationship exists between exports and economic growth. Panel Granger Causality test shows evidence of unidirectional causality from exports to economic growth. These preliminary results laid strong foundations for constructing Panel Error Correction Model with Cross-sectional Dependence. Empirical analysis indicates that there are significantly positive long-run and short-run export effects on economic growth in our sample, and the long-run effect is stronger than the short-run effect. Exports generally contribute to economic growth along B&R countries, which lend support to Export-led Growth Hypothesis. In short, our findings suggest international trading and regional integration are beneficial among the B&R countries while trade protectionism, on the other hand, hinders the growth.

Iwata, Shigeru and **Yin, Xunzhao,** University of Kansas

A Decline in the Natural Rate of Interest: Is it Real?

Abstract: The natural rate of interest, or popularly called r, is central to monetary policy discussions as it constitutes the benchmark of widely-used policy rules and provides a gauge on how tight or loose monetary policy is. It is, however, not directly observable and its practical usefulness has been hindered by impreciseness of its existing estimates. We propose a novel paradigm to pin down r with precision. We postulate the information of r has been hidden in the dynamics of Treasury yields and can be retrieved with the help of a term-structure model. Macroeconomic data are decomposed into long-run trends and short-run cyclical components. While short-run variables including the cyclical component of the federal funds rate impinge mainly on the shortened of the yield curve, long-run economic variables such as r's are able to affect both ends. We model economic variables and Treasury yields together using a no-arbitrage macro-finance framework, and estimate r using Gibbs sampling and Kalman filter. We find r highly correlated with the yield curve *level* while the federal funds rate gap is strongly related with the *slope*. The uncertainty band surrounding our r estimates is narrower compared with other researches. We find r has been declining since the early 1990s, and the hypothesis that r is a constant can be rejected with confidence.

Jin, **Man,** Oakland University

Information Asymmetry and Leverage Adjustments: A Semiparametric Varying Coefficient Approach

Abstract: Information asymmetry reflects the risk and uncertainty faced by investors and is a measure of a firm's transparency. High information asymmetry could increase the costs of external finance, and in turn impede a firm's leverage adjustment. This paper studies the adjustment speed toward the target leverage in the presence of information asymmetry, using micro data from China. We allow heterogeneity in the adjustment speed by expressing it as a nonparametric function of information asymmetry and other firm characteristics. This refinement allows more flexibility in the model, as well as allows further exploration regarding the differences and determinants of firms' financing behavior. We uniquely build the firm-level measure of information asymmetry in the traditional partial adjustment framework. We control for the endogeneity problem in the dynamic panel-data model by including the correlated random effects. We address the fundamental question

of why the adjustment speed matters by examining its correlation with the corporate performance indicators. Our results show that China's firms do have target leverage and they slowly adjust toward the targets. Our results also imply that the adjustment speed decreases with information asymmetry. Overall, firms which converge toward their targets faster, do perform better in value, profitability, investment and costs.

Jin, Yizhou, Harvard University

Buying Data from Consumers – The Impact of Monitoring Programs in U.S. Auto Insurance

Abstract: This paper studies the economic impact of direct transactions of consumer data in the context of auto-insurance monitoring programs, in which insurers incentivize consumers to have their driving behavior monitored for a short period of time. We acquire proprietary datasets from a major U.S. auto insurer that offers a monitoring program. The data is matched with price menus of the firm's main competitors. We first develop a structural model of consumers' monitoring opt-in choice in relations to their insurance demand and the cost to insure them. Key parameters are estimated using rich data variation in insurance claims, prices, contract space, and monitoring status. We then conduct counterfactual simulations using a dynamic pricing model that endogenizes the firm's information set. We find three main results. (i) Data collection changes consumer behavior. Drivers become 30% safer when monitored, which boosts total surplus and alters the informativeness of the data. (ii) Safer drivers are more likely to opt in. But monitoring take-up is low due to both consumers' innate preference against being monitored and attractive outside options from other insurers. Nonetheless, introducing monitoring raises both consumer welfare and total surplus. (iii) Proprietary data facilitate higher markups but protect the firm's ex-ante incentives to produce the data. A counterfactual equilibrium in which the firm must share monitoring data with competitors harms both profit and consumer welfare. This is because the firm offers smaller upfront incentives for monitoring opt-in, so that fewer drivers are monitored in equilibrium.

Kaplan, David, University of Missouri

Comparing Latent Inequality with Ordinal Data

Abstract: We consider comparing two latent distributions when only ordinal data are available. The widely used self-reported health status from health economics is a leading example, but our results can apply equally to happiness, bond ratings, political indexes, school ratings, and other ordinal variables. Distinct from the literature, we assume a continuous latent distribution but not a parametric model. Instead, different shape restrictions and semiparametric restrictions are considered. Primarily, we contribute (partial) identification results: given two known ordinal distributions, what can be learned about the relationship between the two corresponding latent distributions? In particular, the focus is on two types of inequality: between-group inequality (one group is better) and within-group inequality (one group is more dispersed). That is, certain ordinal relationships imply that one latent distribution is better than another, and other ordinal relationship imply one latent distribution is more dispersed than another. ``Better'' refers to Atkinson's (1987)

notion of restricted first-order stochastic dominance. ``More dispersed'' means certain sets of inter-quantile ranges are larger. Secondarily, we discuss Bayesian and frequentist inference on the relevant ordinal relationships, which are combinations of moment inequalities. We both implement and compare Bayesian and frequentist methods, which can suggest very different conclusions. Simulations and empirical examples illustrate our contributions. One example compares health among U.S. states using PSID data and a nonparametric Bayesian procedure that accounts for the complex sampling design. Another example examines selection into a workplace wellness program, using frequentist methods. Full paper: https://faculty.missouri.edu/~kaplandm/pdfs/Kaplan_Zhuo_2019_ordinal_comparison.pdf

Keating, John, University of Kansas

A Robust Empirical Model of Monetary Policy

Abstract: A new indicator variable for the stance of US monetary policy is needed. It was necessitated by the 7 years period over which rates were at their effective zero lower bound (ZLB) following the Great Recession. And even though rates are not at the ZLB currently, rates will likely be hitting the zero bound a significant fraction of the time in the future given the current regime of very low nominal interest rates. A well-known approach to dealing with this problem is to use a shadow rate as the policy indicator variable. This paper shows the shadow rates that have been proposed are subject to pervasive and huge price puzzles, questioning their usefulness as a policy indicator. Following Keating, Kelly, Smith, and Valcarcel (JMCB 2019) – or KKSV - we consider using Divisia M4 as the indicator of monetary policy's stance. Divisia M4 is a broad measure of money that attempts to weigh different assets by their monetary services (in contrast to simple sum aggregates). In all of our estimates we use time varying parameter VARs with a standard identification assumption (a variant on a classic identification that was quite popular until the ZLB took effect in 2008). The effects of monetary policy could vary over time. Reasons include variation in the Fed's operating procedure, the effects of policy may be different during recessions than when the economy is near full employment, or the tools a central bank uses when the ZLB is in effect are different than the policy tools used in more normal times. We estimate a time varying version of the baseline model from KKSV, which uses Divisia M4 as the policy indicator variable, and find that a monetary policy shock shows no puzzling impulse responses. A monetary tightening raises interest rates and lowers the quantity of money, causing a rapid decline in output and a delayed drop in the price level. And somewhat surprisingly, the point estimates are very similar at each point in time. There is no statistically significant evidence of changes in the impulse responses over time. Thus, our method for identifying policy effects using Divisia M4 yields estimates that are qualitatively and quantitatively robust to situations that some might think would alter these effects.

Keinsley, Andrew, Weber State University

Marginal Income Tax Rates, Economic Growth, and Primary Fiscal Deficits

Abstract: Economic theory suggests that variations in marginal tax rates are more important for consumption and investment decisions than the average rates commonly studied. This paper

analyzes the aggregate implications of the statutory tax code, using a new times series on annual marginal tax rates that decomposes the federal income tax code into its "level" and "progressive" (or spread) components. Robust results from a vector autoregression model show that increasing the spread of the marginal income tax rates has a positive impact on private spending growth, leading to an indirect, negative impact on the primary deficit ratio. Contrary to the political narrative, the general level of these tax rates does not significantly impact growth rates or the primary deficit ratio.

Li, Dan, Northeast Agricultural University

Measurement and Rationalization of Grain Crop Insurance Premium Rate—Based on evidences from 10 counties and districts in Heilongjiang Province

Abstract: The precise determination of the crop insurance premium rate should fully reflect the condition of the subject - matter's in the wake of the natural risk. From the perspective of insurance risk management, the paper evaluated the risk of current crop insurance plans through the stability coefficient. Then it established the utility function for grain crop insurance stakeholders from the perspective of the composition of grain crop insurance premium rate. Further on, it used the genetic algorithm to optimize the target function. Finally, according to the above-mentioned empirical results, the paper concluded that raising the crop insurance subsidy by the government was effective for reducing crop insurance operational risks and improving the level of protection on farmers.

Li, Gang, Huazhong University of Science and Technology

Research on the Influence and Mechanism of Government Fiscal Policy on Graded Diagnosis and Treatment System

Abstract: As an important driving force for the promotion of graded diagnosis and treatment system, government fiscal policy plays a key role in the construction of graded diagnosis and treatment system in China. In September 2015, the "Guiding Opinions on Promoting the Construction of Graded Diagnosis and Treatment System" issued by the State Council emphasized that "the financial department should implement the financial subsidy policy" and "the preferential policy for implementing medical insurance contributions in the classified medical treatment". But how does the government promote fiscal policy to promote the implementation of a graded diagnosis and treatment system? Few scholars have studied this aspect. Objective: This paper takes the influence and mechanism of government fiscal policy on the graded diagnosis and treatment system as the research content, and hopes to explore the role of government fiscal policy in the construction of graded diagnosis and treatment system through theoretical analysis and game theory model deduction. Methods: The theoretical analysis method and the game theory analysis method are adopted. Results: The government's fiscal policy allows patients to be eager to receive a grading diagnosis and treatment model by reducing the direct and indirect costs of patients' medical treatment. The fiscal policy can increase the income of medical institutions by subsidizing different levels of outpatient and hospitalization at different levels of hospitals. This approach

allows hospitals of different levels to be happy to receive a grading system. In short, government fiscal policy can increase the extent to which different levels of medical institutions and patients receive the hierarchical medical system. Conclusion: The government fiscal policy is an important means to promote the realization of the hierarchical medical system in China.

Li, Hongbin, Stanford University

The China Model

Abstract: China's economic success has been driven by economic liberalization since 1978. Unlike in most other countries, local officials were the drivers of China's growth because of the loosening of central state control. The decentralization of power, using promotion to incentivize local officials and letting officials to compete against each other are the explanations for China's thirty-plus years of miraculous economic growth. This same economic model can also explain China's recent slowdown. With decision-making re-centralized and profit/growth incentives for local officials removed, government officials no longer care about growth. At the same time, they still control many resources but have little incentive to use them efficiently. Thus, to regain the growth momentum, China may need to transit to a true market economy.

Li, Junqing, Nankai University

Legal Environment, Enterprise Specific Investment and Total Factor Productivity

Abstract: It is well known in economic theory that contract execution is very important bond between enterprises. But incompleteness of contracts tends to reduce specific investment and inhibits industry specialization development. How to solve the lack of specific investment thus becomes very important for economic development. Legal environment has an important impact for signing and executing contracts. Therefore, in this paper, we built a model to analyze the interactions among legal environment, incomplete contract and technology investment. When the contract is incomplete, improving the legal environment will improve suppliers' expected earnings of specific investment. Suppliers will gain more residual claims about expected earnings of specific investment. So rational suppliers will provide more specific investment and it will promote the development of industry specialization and enterprise's production efficiency. With the development of industry specialization, high efficiency of enterprise will increase more specific investment. This paper uses sound empirical analysis to illustrate the following aspects: (1) Using the industrial enterprises database (1998—2007) to show the relationship between legal environment and specific investments. We show that the stated relationship is significant in (2SLS), cross the equation constraints (3SLS), grouped regression. (2) Sub-sample study shows that improvement of the legal environment is more conducive to the non-state-owned enterprises and the enterprises with high total factor productivity. (3) We also use difference-in-difference (DID) to explain the causes of "productivity paradox" about China's export enterprises. Improvement of the legal environment will alleviate the "productivity paradox" about China's export enterprises. (4) It also shows that there has been a serious misallocation of resources in China's industry. The industry-level data also show that the interaction between legal environment and the specific investment has important influence for efficient resource reallocation.

Liao, Jingwen, Kansas State University

On the Extent to Which Consumers' Behavior Reveals the Substitutability Between Soft Drink and Coffee

Abstract: Coffee and soft drinks are two popular caffeinated beverages for U.S. consumers. To the extent that consumers do perceive these two products as substitutes, such relationship may affect the pricing and marketing strategies of firms in both coffee and soft drink industries. This article first empirically investigates the extent to which consumers' choice behavior reveal that soft drinks and coffee are substitutes by estimating a discrete choice model of demand. Secondly, we simulate the hypothetical merger effects on prices and welfare measurements such as consumer surplus and variable profits. We find that estimates of cross-price elasticities of demand are statistically significant, suggesting that, on average, consumers perceive coffee products substitutable for soft drink products. Even though counterfactual experiments reveal that the mergers between coffee and soft drink companies have the statistically significant impact on the pricing strategies and consumer surplus, the magnitude of these merger effects is often less than 1%, suggesting economically weak substitutability between the two product categories.

Lin, Ming, Xiamen University

Resampling Strategy in Sequential Monte Carlo for Constrained Sampling Problems

Abstract: Sequential Monte Carlo (SMC) methods are a class of Monte Carlo methods that are used to obtain random samples of a high dimensional random variable in a sequential fashion. Many problems encountered in applications often involve different types of constraints. These constraints can make the problem much more challenging. In this paper, we formulate a general framework of using SMC for constrained sampling problems based on forward and backward pilot resampling strategies. The proposed method is used to compute long-run marginal expected shortfall (LRMES) and to sample constrained trading paths.

Lio, San, United States International University-Africa

Currency Manipulation and the Prosperity of Nations: Empirical Implications from Kenya

Abstract: The study examines why the unethical practice of currency manipulation persists; and how this would influence the prosperity of Kenya. Design/methodology/approach- The study is an explanatory survey of the financial regulators in Kenya, seeking to answer the key question why currency manipulation persists, and testing the forex intervention model. Findings-Currency manipulation is evil, and yet the free-floating regime would hurt the prosperity of Kenya's developing economy. Furthermore, some countries are selfish and unethical. Contemporary finance theory on forex regimes is unhelpful to honest nations. Originality/value-CNN transmitted news of President Donald Trump accusing the Chinese authorities of currency manipulation

leading to USA weak financial prosperity. Whether or not this is true is a big deal for nations, including Kenya.

Liu, Fang, Yunan Normal University

Inflation, Exchange rate Fluctuations and Persistent Dollarization: Evidence from Cambodia

Abstract: Using GARCH and Vector Autoregressive (VAR) model simultaneously, this paper aims to examine the long-run and short-run effects of inflation and exchange rate jump on dollarization in Cambodia. The major finds are: (1) Inflation has a strong positive effect on dollarization in short-term. In the long run, however, the effect of inflation on dollarization is a significant negative. (2) Exchange rate fluctuation has a weak negative influence on dollarization in the short run, but it has a significant effect on dollarization in the long term. (3) Cambodian dollarization has a strong hysteresis, which lagged variable is significant positive effect on current variable. Besides, to avoid the causality connection inverse, we also find dollarization has a negative effect on inflation in the short run and a little effect in the long run. While dollarization promotes exchange rate fluctuation in the short run and restrains it in the long run. Therefore, Cambodian persistent dollarization is the result of inertia of history matters, not entirely due to inflation and exchange rate fluctuation. In contrast, with the progress of dollarization in Cambodia, it will lead to much exchange rate fluctuations between KHR and USD.

Liu, Junyi, Soka University of America

Determinants of Foreign Exchange Rate Exposures: Evidence from China

Abstract: This paper empirically investigates the determinants of foreign exchange rate exposures using the data of all public firms in China from 2005 to 2017. The main results of linear and nonlinear regression tests that size of firms, foreign sales, and foreign loans have statistically significant impacts on exposures resonate with the empirical findings of existing literature. The comparative study of foreign exchange rate exposures prior to and subsequent from China's exchange rate reform on August 11, 2015 shows that the reform reduced exposures as it allows for varieties of hedging activities that alleviate exchange rate risks.

Liu, Kaifeng, Nankai University

Legal Environment, Contract Intensity and Export Product Quality

Abstract: Many growth theorists have emphasized the role of institutional quality on the long-term growth of an economy. We try to enrich this literature by studying institutional quality and foreign trade of an economy. In this paper, we construct a simple game theoretic model to illustrate that the improvement of the legal environment can improve the quality of the final products by improving the quality of intermediate products, especially for industries that are require more relation-specific intermediate inputs. Using the Chinese Customs Database and the Industrial

Enterprise Database from 2000 to 2006, we measure the quality of export product quality at firm-product-country level and examine the effect of legal environment on the quality of export products. The empirical study shows that the improvement of legal environment can improve the quality of export products, especially for firms with high contract intensity. And the result remains robust when using system-GMM estimation to consider the endogenous problem. Further study shows that the impact of legal environment is relatively larger for the foreign enterprises and the enterprises that located in the eastern regions.

Liu, Xin, University of Missouri

Finite-Sample Improvement for IV Quantile Regression

Abstract: When using instrument variable method in a quantile model, the estimation often has bad finite sample performance due to its large variance. This paper proposes three different estimation methods that improves the finite sample properties on IVQR estimator. First, we apply an averaging GMM framework in Cheng, Liao, and Shi (2018) to the quantile model, using de Castro, Galvao, Kaplan, and Liu's (2018) smoothed GMM method. They define a "conservative" GMM estimator based on a set of valid moments, and an "aggressive" GMM estimator based on the set of moments that combines both the original valid moments and additional suspicious moments. It averages between these two GMM estimators, and shows the averaging GMM estimator has a better efficiency than the "conservative" GMM estimator. This paper considers the IVQR estimator as the benchmark "conservative" GMM estimator. We propose two types of additional moments, the conventional QR moments and 2SLS moments (excluding the intercept). If there is not much endogeneity in the model, then QR usually has small bias and much smaller variance than IVQR, so averaging can greatly improve efficiency. If there is not much heterogeneity across quantiles, then 2SLS and IVQR at any quantile estimate similar slopes (so small bias), and 2SLS usually has smaller variance (unless the error term is fatter-tailed). Additionally, the 2SLS estimator can be viewed as a special case of smoothed IVQR estimation that the smoothing bandwidth goes to infinity. With these two types of additional moments, we obtain the corresponding "aggressive" GMM estimators, and then the averaging GMM estimators using the empirical optimal weight formula from Cheng et al. (2018). Second, we bootstrap an averaging estimation among IVQR estimator, 2SLS estimator and QR estimator. That is, we compute averaging estimators for a large grid of averaging weight vectors, then choose the weight that minimizes RMSE in the bootstrap world. Finally, we propose a quantile k-class estimation. It is motivated by the fact that the k-class estimators have a smaller bias than 2SLS estimator in some special cases in the usual least square setting. We study the consistency and asymptotic distribution of the quantile k-class estimator. Simulation results demonstrate the finite sample properties of these estimators, compared with IVQR estimator. It shows a significant improvement on efficiency with averaging estimation across many different DGPs that accounting for different endogeneity level and heterogeneity level on certain quantile level, without sacrificing much in the least favorable DGPs.

Liu, Xiyuan, University of Kansas

Semi-parametric Quantile Estimations for Functional Index Coefficient Models with

Variable Selection

Abstract: In this paper, we consider quantile regression methods for functional index coefficient time series models with variable selection. Methodologically, we combine methods of the local polynomial smoothing and the Least Absolute Shrinkage and Selection Operator (LASSO) in a quantile framework for strong-mixing time series. Our procedures consist of two steps. The first is to select covariates with functional coefficients, and then we select variables with parametric coefficients. The asymptotic properties, such as consistency, sparsity and the oracle property of these two-step estimators are investigated. The simulation results show that our new methods of estimation and variable selection work fairly well. An empirical example constructing a novel class of financial network further demonstrates the potential of the proposed estimation and variable selection procedures.

Liu, Xuan, East Carolina University

GHH Preferences on Households' Portfolio Choices: Theoretical Implications and Empirical Evidence

Abstract: This paper explores theoretical implications and empirical evidence of GHH preferences [Greenwood et al. (1988)] on portfolio choices. We make contributions in four dimensions. First, we solve a parsimonious life-cycle portfolio choice model with the GHH preferences and endogenous labor-leisure choice and obtain a closed form solution. Second, our analytical solution identifies four effects due to endogenous labor-leisure choices one risky shares; and it shows that net effects hinge on the value of one key structural parameter. Third, we test the key theoretical predictions with the Panel Study of Income Dynamics data. Overall, the estimation results provide empirical evidence of GHH preferences. Thus, our analysis provides a positive answer to one of the most important questions in quantitative macroeconomic analysis, the choice of utility functions in a representative agent model.

Liu, Yijiao, Stony Brook University

How will Hukou Reform Affect the City System in China?

Abstract: This paper applies the novel spatial dataset, China Spatial Administrative Unit Coding System (CN-SAUCS), constructed by Yijiao Liu ("Distinguishing Places and Populations in China: A Comprehensive Geo-Coded Dataset of Census and Administrative Hierarchy", 2018) to quantify the consequences of hukou reform trials prior to the national 2014 hukou reform Opinions on Further Reform of the Hukou System, on migration flows to different types of destinations in China. The 2014 reform was designed to encourage migration to small or medium size cities, and away from large urban centers. By using a discrete choice model, estimates show that there is more than one possible strategy of hukou reform that will achieve this goal, while also revealing general preferences of Chinese migrants: people prefer richer places that are closer to their original hukou registration locations. Migrants may find places that have already undergone reform more attractive, even if they are geographically further. However, those zones are generally less affluent

at the beginning stages of implementing reform and opening-up migration policies.

Liu, Ying, Shandong University

Effects of Driving Restrictions on Air Quality: Evidence from a Natural Experiment in China

Abstract: As the measure of driving restrictions is less expensive to enforce and demand fairly smaller public investments compared with other air-cleaning actions, it is more and more popular in many cities all over the world to reduce air pollution. It is therefore worthwhile to study whether the driving restrictions are effective in improving air quality and in what extent. However, two existing difficulties impede the identification of causal effects of the driving restrictions on the air quality. One is that the driving restrictions are implemented with many other air-cleaning actions simultaneously and it is hard to isolate the independent influence of the driving restrictions. The other one is that most of the driving restrictions are taken in the long run and drivers tend to take countermeasures, such as driving towards unrestricted hours or buying a second car, which may offset the effect of the driving restrictions on air quality or even aggravate the pollution. The unique setting of the driving restrictions in the city of Jinan in China provides us a good opportunity to overcome the abovementioned limitations. We consider the introduction of the measure of three-stages driving restrictions in this city in the context of natural experiment. The restricting hours are from 7:00 till 19:00 each day in a short period of time, which will make drivers hard to drive towards from 19:00 till 7:00 and hence reduce the substitution effect on the one hand. On the other hand, the short-term nature of this measure will further reduce the incentives to buy a second car. A pre-treatment analysis shows that the city of Jinan and other cities in the same province exhibit the common trend in terms of NO2, PM10 and API before the introduction of driving restrictions. By comparing the differential air pollution level in this city and other cities before, during, and after the driving restrictions period, we can obtain a cleaner effect of driving restrictions on air quality. The results show that the driving restrictions can significantly reduce NO2, PM10 and API by 26.2%, 31.5% and 24.8%. The effects will decrease with the decrease of the three-stages restricting areas. Besides, the effects of driving restrictions will fade away quickly as the measure withdraws. The results are robust across study samples and model specifications.

Liu, Yue, Central University of Finance and Economics

Income Distribution, New-Consumer Margin, and Price Differences Across Countries

Abstract: Prices are different across countries, even for exactly identical tradable goods. For many products, the prices are higher in developing countries (e.g. China) than prices in developed countries (e.g. the U.S.). Variable markup is one important reason for price differences. We analyze the impact of income distribution on prices through markups. As average income increases, firms face a trade-off between higher markup and more consumers. If the density function of income is a decreasing function, the incentive to lower prices to attract more new consumers could be large. We build a model with non-homothetic preference and heterogenous agents in terms of different incomes. The model predicts that, first, income inequality has positive impacts on price levels.

Second, average income has negative effects on prices in low-income countries. Third, average income has positive effects in high-income countries, but the relative prices of high- over low-quality products decrease in average income. Empirical evidences with prices of thousands of identical products across more than 60 countries are consistent with the theoretical predictions.

Liu, Zixin, University of Missouri – Columbia

Impact of College Expansion on Skilled Labor Market in China

Abstract: An unprecedented expansion in Chinese higher education system began in 1999, bringing a large number of skilled labors into the market. In this paper, we study the short-term response of the labor market to this college expansion using the Chinese General Social Survey (2003-2015). Using the number of provincial college admissions as a measure of college expansion, we are able to identify the impacts of the positive supply shock of skilled labor on the college premium, unemployment, and skills used in first jobs. Our results suggest that, in the short run, the college expansion decreases the college premium and increases the likelihood of unemployment for new college graduates. The decrease in the college premium for new college graduates occurs both within and between occupation and industry. Also, the college expansion reduces the cognitive skills used in their first jobs. However, we do not observe a significant decline in the college premium for older workers due to the college expansion, but it increases their likelihood of unemployment. Our results are consistent with findings published in the 1970s focusing on the effects of the U.S college expansion. Our paper contributes to the previous literature in several ways. First, previous studies on the effect of Chinese college expansion are mostly descriptive. In this paper, we use number of students admitted to college to quantify the college expansion and study its impacts on labor market outcomes for young and older workers. Second, we employ college admission as an instrument identifying the supply shock in our analysis. Since the increase in college admission is due to pre-established government policies, we believe this instrument is less likely to be affected by trends in contemporaneous demand. Our instrument is useful in reducing endogeneity due to difficulty in separating supply and demand effects when estimating the college premium. Third, in our study of the impact of the college expansion on skills used in first jobs, we combine individual occupation data from the CGSS with O*NET codes to calculate the scores of cognitive and manual tasks used in first jobs. This provides an alternative perspective on the impact of college expansion to new college graduates.

Luo, Zijun, Sam Houston State University

Does Hukou Pay? Evidence from Nanny Markets in Urban China

Abstract: Based on the information of over 170 thousand individuals who signed up on a Chinese online job site of part-time and full-time in-house care providers, we attempt to quantify the economic effect of Hukou, the Chinese household registration system that puts restrictions on migration especially from rural to urban areas. We find that, after controlled for individual characteristics and city level macroeconomic indicators, nannies have higher expected wage in cities that have more restrictive Hukou entry. The effect is less significant in high-skill nannies, such as maternity matrons and live-in nannies. The effect is also less significant in high wage

quantiles. One possible explanation is whether the nanny markets are better established in a location or for certain types of job.

Ma, Biao, Renmin University of China

Evolution of the Hog Market Integration in China: An empirical Analysis

Abstract: Market integration is the important indicators of estimating marketization level and market efficiency, this paper utilizes the method of Minimal spanning tree to analyze the correlation of Chinese hog market with monthly data from 2000 to 2017, so that demonstrating "Central Market" have significant impact on hog price in the whole country. Then, using the "rolling time window" method to describe the dynamic evolution of hog market integration. The empirical results show that the hog market integration level improves gradually, and has reached a higher level. The hog market integration has a structural turn in April 2007, after that the hog market integration level increases significantly, and the relationship between the hog market of the provincial is also more stable. Shandong province is the central market reflecting the trend of hog price in China, namely the price maker, and the market power of hog market in the east China and central China is growing, but the hog markets in southwest, northeast China and north China are on the brink of minimum spanning tree, known as price followers. The above conclusions given by Minimum spanning tree method are the robust results. Finally, advices of stabilizing hog price and ensuring hog supply are proposed.

Ma, Jun, Northeastern University

Global Housing Markets and Monetary Policy Spillovers: Evidence from OECD Countries

Abstract: What are the driving forces of housing market volatilities across countries in the context of financial globalization? To address this broad question, we integrate the Campbell-Shiller decomposition with a dynamic factor model and apply this approach to the housing price-rent ratios in 17 OECD countries. Our novel approach allows us not only to assess geographically the relative importance of global and country-specific factors in explaining the housing market volatilities, but also to distinguish economically between those housing market volatilities attributable to different economic driving forces. We find that the housing market volatility for an average country is mainly driven by the global factors, especially during the years leading up to the 2007-2008 financial crisis. Furthermore, among the global factors, it is the global housing risk premium that is primarily responsible for the housing market volatility. Using a Structural Vector-Autoregressive (SVAR) model identified with the Instrumental Variable (IV) method, we find that an unexpected U.S. monetary policy tightening is typically followed by a persistent and statistically significant rise in the global housing risk premium. Our findings are broadly in line with the credit or risk-taking channel of the monetary policy spillovers from the United States to the global financial markets.

Meng, Juan, Jinan University

Nonlinear Impact of Economic Policy Uncertainty Shocks on Credit Scale: Evidence from China

Abstract: After building a theoretical model on how economic policy uncertainty does influence credit actions, we explore the nonlinear effect of economic policy uncertainty shocks on the credit scale in China by applying a Smooth Transition VAR Model and using China's Economic Policy Uncertainty Index built by Baker et al. and China's macro-economic monthly data from April 1996 to April 2017. The theoretical model shows that an increase of economic policy uncertainty may cause a negative shock to the social investment and the credit of the banks. Given the important role of credit scale in the optimization of monetary policy, however, to our knowledge, no study is available with regard to the impact of EPU shocks to credit scale in China. This paper fills the gap by utilizing Smooth Transition VAR model to analyze the effect. As suggested by Caggiano et al. (2017), such framework and allows us to identify the probability of being in recessions by estimating the slope of the logistic function, and distinguish the two regimes (i.e. expansions and recessions) by estimating the threshold. Based on this, we finally compute generalized impulse responses of macro variables after a one-standard deviation increased shock and find the nonlinear character of EPU shocks on credit scale in China. The empirical results corroborate a nonlinear effect of economic policy uncertainty shocks on macro variables in expansions and in recessions. In particular, we find that China's economy is fragile in expansion. And we also document that the negative response of economic policy uncertainty shocks to credit scale is larger in expansions. Moreover, we find that economic policy uncertainty induces a significant decline to the growth of economy in China.

Mo, Bin, Jinan University

Peer Effects in Monetary Policy and Capital Structure

Abstract: Moderate financial leverage is conducive to corporate profitability and economic development, but if the debt ratio is too high, which will increase the pressure of corporate debt repayment, increase the risk of corporate operation, and even affect the stable operation of the macroeconomy. In recent years, the government has attached great importance to the high debt level of non-financial enterprises and has adopted a series of measures to lower corporate financial leverage. However, as the monetary policy, one of the national important macroeconomic policy tends to have the industrial asymmetric effect on corporate financial leverage, the unified monetary policy can hardly achieve the desired effect of lowering corporate financial leverage. At the same time, considering the social human attribute of managers, their decisions are inevitably affected by peer companies, and the effect of monetary policy on the corporate capital structure may also be affected by the peer effects. In order to get a more comprehensive view of peer effects in the influence of monetary policy on corporate capital structure, we take China A-share listed companies as the data sample, and empirically document the impact of monetary policy on enterprise capital structure from the perspective of peer effects. The results show that: i) monetary policy has a significant impact on enterprise capital structures, and the loose (tight) monetary policy will increase (reduce) the financial leverage of the company. ii) The capital structures of listed companies in China have peer effects. iii) Peer effects can reduce the impact of monetary

policy on corporate capital structure, especially for the industries with a high degree of competition, strong uncertainty, and fast growth speed. Our results highlight that the policymakers need to make the flexible use of structural monetary policy tools, in conjunction with industrial policies, to better promote the steady reduction of corporate financial leverage in the industry, and ensure the healthy development of the economy.

Mughal, Muhammad Farhan, Central China Normal University

CPEC as a Symbol of Game-Changer in Development Transport, Trade and Economy of Pakistan

Abstract: This research aimed to investigate the efficiency in transport and trade through China-Pakistan Economic Corridor (CPEC) and to determine the efficiency in trade and economy through developed of transport networks. This research was carried out in four provincial capitals of Pakistan namely Lahore, Karachi, Quetta and Peshawar. Data was collected from the stakeholders and relevant sectors being developed through CPEC including investors, chamber of commerce, railway employees. Employing bi-vitiate analysis through chi-square test revealed that majorly of results showed that there is a positive and significant association among the projects of CPEC and efficiency in transport and trade in terms of economy. A significant positive association was found between the development of transport routes through CPEC and smooth transportation of goods and services. Besides, a significant positive association was also found between CPEC projects and improvement in travelling potential. The similar findings arrived between development in transport infrastructure and fastness and reliability in business travelling. On the other hand, a significant positive association realized between CPEC and improved geographical size of the labor market. These findings reveal that CPEC as a project would ensure smooth efficiency transportation of trade goods and services through reduced time, cost and distance. It is recommended that CPEC as a project should limit to economic activities, rather it should contribute to the overall socio-economic development of the region.

Naz, Madeeha, University of International Business and Economics

Sustained Economic Growth with Greener Environment. Recommendation to Chinese Government for Green Economic Growth

Abstract: In developing countries to get better opportunities of living people are migrating from rural area to urban centers and the process of urbanization of economies is taking place. According to UN report the 54% population of the world is living in the urban areas of the world (UN, 2014). The urban areas contributed a major chunk in the total GDP of the world (MGI, 2011). Urban centers are developing at a rapid pace and without any planning specially in the developing countries of the world. Because of this trend the countries are facing challenges of environmental degradation and tradeoff between development of economies and environmental pollution become difficult to manage (Zhang et al., 2018). In many countries the importance of green environment has been widely accepted and policy makers have made ecological sustainability as one of the prerequisites of the economic development of the economy. Ecological system of cities of China

is deteriorated in the last two decades due to rapid urbanization of the country. To seek better opportunities, people from rural areas of the country migrated to cities and it affects badly to the environment of the cities. The air quality of many cities in China is affected badly and it became dangerous for inhabitants. To counter it the Chinese government under the leadership of President Xi Jinping, took many initiatives to improve the environment of the cities and minimize the emission of CO_2 in the air. The initiatives to control pollution may negatively impact the growth of the economy and it may hinder the economic growth of the country. The government of China is taking initiative to make such an environment policy which improve the ecological system of the urban areas of the country and not adversely impacts the economic growth. This is an interesting situation and it need to be studied that how economies of the world counter the bad impact of economic growth on the ecological system of the countries and still make economic progress. In this study we will study some of the economic models which can be implemented by Chinese government to improve the environmental situation of the urban areas with sustained economic growth. Importance of this study is not only limited to Chinese environment only, but it is quite useful for other developing economies of the world to make strategies for economic growth with minimum negative effect on the ecological system.

Ni, Jinlan, University of Nebraska at Omaha

Collateral and Cash Holdings During the Housing Bust: Evidence from Listed High-Tech Firms

Abstract: During the housing bust period, real estate depreciation tends to weaken a firm's financial capacity. To buffer its R&D investment, a firm is expected to turn to its cash its cash reserves when its financing capacity is weakened. By examining listed high-tech firms during the housing bust period 2008-2012, we find that a \$1decrease in real estate value leads a high-tech firm to reduce its cash holdings by \$0.70. We also find that this collateral effect is more pronounced among financially constrained high-tech firms. In contrast, this effect is insignificant among non-R&D firms, in which buffering fixed investment is not an urgent need.

Nian, Tingting, University of California Irvine

Can (S)he Code? Gender Bias in an Open Source Software Community

Abstract: It is well-documented that women are underrepresented across all STEM fields and particularly in computing. Amongst the many factors that impact women's lack of participation in computer science-related fields, previous research identifies the negative stereotype about women's abilities is one of the leading reason. In order to scientifically examine the issue of gender bias in online open source software communities, our study investigates whether and to what extent there exists a gender bias in the programming question-and-answer site, Stack Overflow. We employ a difference-in-differences approach to estimate the effects of gender bias by comparing the average monthly votes before and after users revealed their gender as female, a signal communicated through a female-sounding name or a female-looking picture. Our results reveal a net discrimination of 0.4 votes per month against female participants, statistically significant at the one percent level. We also found evidence suggestive of the statistical discrimination at work. On

the contrast, as users reveal their gender as male, they receive an increase of votes following the gender-revealing change.

Nie, He, Jinan University

Monetary Policy, Inflation and Real Estate Prices: Evidence from China

Abstract: Given the endogenous relationship between monetary policy, inflation and real estate prices, and the nonlinear characteristics of monetary policy, we construct a partial equilibrium model and aim to employ a time-varying parameter vector autoregressive model with stochastic volatility to empirically document the dynamic time-varying relationship between monetary policy, inflation and real estate prices with China's macroeconomic data from January 1998 to December 2017. Our results show that monetary policy has obvious time-varying effects on real estate prices, similar results can be found in monetary policy and inflation, as well as real estate price and inflation. From the perspective of policy effect, quantitative monetary policy has better effects on house price regulation. The quantitative monetary policy has a significant long-lasting positive impact on real estate prices. The increase in the money supply causes housing prices to rise, while the price-based monetary policy has a short-term negative impact on housing prices, and the long-term impact will weaken and gradually become zero. The central bank can strengthen the implementation of quantitative monetary policy while unblocking the transmission effect of interest rates on house prices, and increasing the interest rate sensitivity of house prices. Furthermore, there is the lagging restraining effect of price-type monetary policy on inflation and the positive impact in the short-term while the long-term effect is negative. Besides, the impact of quantitative monetary policy on inflation in the short term is significantly positive, and the long-term impact would disappear. The response of inflation to real estate price fluctuations shows a time-varying characteristic of procyclicality. In particular, during the economic expansions, the response to inflation continues to increase, and as the recessions, the response to inflation continues to decrease. Some relevant policy implications are concluded.

Nie, Jun, Federal Reserve Bank of Kansas City

Growth and Welfare Gains from Financial Integration Under Model Uncertainty

Abstract: We build a robustness (RB) version of the Obstfeld (1994) model to study the effects of financial integration on growth and welfare. Our model can account for the empirically observed heterogeneity in the relationship between growth and volatility for different countries. The calibrated model shows that financial integration leads to significantly larger gains in growth and welfare for advanced countries than developing countries, with some developing countries experiencing growth and welfare loss in financial integration. Our analytical solutions help uncover the key mechanisms by which this happens.

Noh, Sanha, University of Missouri

House Price Uncertainty, Business Cycles, and Welfare

Abstract: This paper investigates the asymmetric effects of house price uncertainty on economic activity over the business cycle. Preliminary evidence is uncovered with a Markov-switching vector autoregression (MS-VAR) model. The MS-VAR model finds that house price uncertainty shocks in expansionary regimes increase residential investment, housing prices, and mortgage debt, while the shocks in recessionary regimes have the opposite effects. These empirical results are further investigated in an estimated New-Keynesian DSGE model with a housing sector. We find that supply-side uncertainty shocks, mainly driven by uncertainty shocks to investment-specific technology, reproduce the empirical impulse responses in recessionary regimes from the MS-VAR. On the other hand, the responses to demand-side uncertainty shocks, mainly driven by housing preference uncertainty shocks, are consistent with the empirical impulse responses in expansionary regimes from the MS-VAR. We then show that the underlying mechanism behind the relationship between uncertainty and returns to owning houses is associated with a financial risk effect, a housing consumption hedging effect, and a debt risk effect. Finally, we find that the optimal Loan-to-Value (LTV) ratio is countercyclical with respect to housing preference uncertainty and monetary policy uncertainty, but it is procyclical with respect to uncertainty about investment-specific technology.

Otrok, Christopher, University of Missouri at Columbia

Estimating Macroeconomic Models of Financial Crises: An Endogenous Regime Switching Approach

Abstract: This paper develops an endogenous regime switching approach to modeling financial crises. In the model there are two regimes, one a crisis regime, the second a regime for normal economic times. The switch between regimes is based on a probability determined by economic variables in the economy. Agents in the economy know how economic fundamentals affect the probability of moving in or out of the crisis state. That is, it is a rational expectations solution of the model. The solution then ensures that decisions made in the normal state fully incorporate how those decision affect the probability of moving into the crisis state as well as how the economy will operate in a crisis. The model developed captures all of the salient features one would want in an empirical model of financial crises. First, it captures the non-linear nature of a crisis. Second, the regime switching model is solved using perturbation methods and a second order solution. This allows the solution to capture the impact of risk on decision rules due both in an out of the crisis. Third, since the solution method is perturbation based it can handle a number of state variables and many shocks. That is, we are less constrained than current non-linear methods in terms of the size of the model. Fourth, the speed of the solution method means that non-linear filters can be used to calculate the likelihood function of the model for a full Bayesian estimation of the relevant shocks and frictions that are fundamental to models of financial crises. Fifth, the fully rational expectations nature of the solution allows one to ask key counterfactual policy questions. We adopt this approach to study sudden stop episodes in Mexico.

Qian, Lianfen, Florida Atlantic University

Spatial Association of Regional Finance in China via Network Analysis

Abstract: This talk utilizes a spatial location entropy, as a measure of an indicator of regional financial development, to study the spatial association of financial data involving the loans and deposit balance as well as GDP of 31 provinces in China from 1990 to 2015. The spatial correlation and the network structure features in China's financial development are constructed via Granger causality test, the analytic network process and QAP method. The empirical results indicate that: (1) the spatial correlation of China's regional financial development emerges complicated network structure; (2) China's regional financial development is divided into four plates. Plate one is the "main benefit plate" of the underdeveloped areas in west China; Plate two is the "agent plate", which plays the role of "bridge"; Plate three is the "net overflow plate" in east China and plate four is "two-way overflow plate", mainly in the more developed provinces, in the middle east of China. (3) Per capita income level, foreign trade index, the index of the third industry development, the influence of the transport capacity and the ability of government intervention are important determinants, while regional employment status and the geographical location have little influence on adjacent provinces.

Qu, Guangjun, Birmingham Southern College

Political Loyalty, Leadership Style, and Economic Growth: Evidence from China

Abstract: This study investigates whether variation in fiscal resources of a government and regional economic growth in China can be attributed to the political loyalty and leadership style of subnational leaders of the Communist Party of China. The literature suggests that both employees' loyalty and leadership styles affect efficiency of an organization in the private sector. Very few studies look at the relationship in the public sector. Even for the studies looking at the relationship in private businesses, their conclusions are drawn based upon employee survey results, which are problematic given the potential conflict of interest between employees and employers. To measure political loyalty and leadership style, we rely on the official newspapers, or the mouthpiece, of the Party and count the number of articles discussing policies of upper-level governments and characteristics of subnational leaders. We consider the frequencies of these articles in all articles published in the official newspapers as proxies for political loyalty and leadership style, respectively, of the leaders. We find that fiscal resources allocation and local economic performance depend upon both political loyalty and leadership style of the leaders. Our results shed light not only on the role of local leaders in economic growth but also on the general role of the leaders in organizational efficiency and performance.

Ren, Weiwei, Yunnan Normal University

Marriage Search with Active Search Decision: Theory and Application to Parents Searching on Behalf of their Adult Children in China

Abstract: This project addresses the question of when to actively search for a marriage partner. Potential marriage partners can be met during daily life activities but the success rate depends on

several factors such as with how many people one meets and if those are single and the expectations one has of a spouse. However, one can also make the decision to actively search for a partner by doing some additional activity such as collective sports or volunteering, signing up to dating websites or going to dating events. These activities come with a cost and one only engages if the likelihood of finding a spouse is sufficiently increased. We aim to model the decision of active search in non-stationary matching model with search frictions where individuals meet another individual of the opposite set randomly drawn from the population in each period. Unmatched individuals can decide to actively search meaning they pay an explicit cost to have another meeting with an individual drawn only from those that actively search. This option becomes more advantageous the higher the share of matched in the population and the more the distribution of active searchers to one's expectations of a marriage partner. We then use a novel data set of parents that come to a public part in Kunming, China in order to help their adult child find a spouse to provide descriptive evidence. This active search platform attracts mostly locals from the same city. Comparing our data set with representative household data from the same city, we find that children that are represented by their parents at the public park are older but also more educated that the average unmatched population within the city. We use stated preferences on the lowest level of education and income a parent would accept as a spouse for their child to show that people prefer to match assortatively on educational levels. Parents with a daughter accept lower levels of education when the daughter gets older, and parents whose child has already been married also have lower acceptance levels. Additionally, parents whose children are actively searching on other platforms accept lower levels of education. We can also show that though the success rate at the public park is predicted to be low, the chance of finding a spouse without active search is even lower."

Sabo, Martin, University of Colorado at Denver

Operations Management Tools, for All Size Businesses, Heading from West to East!

Abstract: In the early 1900s, the United States' firms began efforts to implement the tools of the discipline of operations research and management. Efficiency, in the timeliness, and quality levels, of producing goods, and services, developed into an art, and a science! It is the charge bestowed upon current business entities to maximize operations efficiency, not only in the U.S., and China, but every business entity on this planet. This presentation champions the blending of quantitative business operations data, and advanced managerial (cost) accounting tools, for enhanced microeconomic efficiency analysis of the firm. A little over a century now, great minds, from all parts of the world, invented quantitative tools, terminology, and implementation strategies to bring all size firms to maximized operations efficiency. This presentation wants to first reiterate the invaluable quantitative, cost accounting, microeconomic tools, that are at their highest level of ease for implementation, in the history of mankind. Then this paper will address current government regulatory environments, for the U.S., as well as in China, and what barriers they impose on small, medium, and large size companies, in their efficiency production pursuits. Quantifying such taxes, fees and regulation costs, and coalescing these costs into microeconomic analysis curves for efficiency analysis is critical for a commercial entity to thrive. Microeconomic/Operations tools such as probability inferences of marginal cost and marginal revenue values, various elasticity calculations, net present value estimates, the optimization of linear cost functions, as well as marginal productivity evaluations of the firm's production, will

enable the entity to correctly cost, and thus, price their products and services for their customers/clients. From Frederick Taylor's century old scientific management principles, to Eli Goldratt's thirty years old theory of constraints in production, to a systemic summary of ground-braking operations theorists, world-wide, will be brought to the forefront of discussion for businesses to access and implement. A summary of the work of Chinese researchers, on supply chain management, will also be advocated, in this paper as well. Contemporary software packages have made it feasible for small and medium-sized businesses to gather critical data, and implement econometric, accounting, finance, and operations management tools, in order to seek optimal production efficiency. The value that certifications such as Six-Sigma, and L.E.E.D., can provide for firms, world-wide, will be undertaken as well. The concept of the "triple bottom line" is upon us…and is headed for China! From West to East!

Shan, Rongzi, University at Albany, SUNY

Fiscal Policy and Default Risk in Emerging Countries

Abstract: This paper studies emerging countries with countercyclical fiscal policy: government expenditures fall (rise) in good (bad) times, tax rate rises (fall) in good (bad) times, and government borrowing falls (rise) in good (bad) times. This contrasts with traditional emerging countries with procyclical fiscal policy. Additionally, the business cycles of these economies are characterized by high volatility of consumption to output, countercyclical current account, countercyclical default risk, and countercyclical public debt. We propose a dynamics stochastic general equilibrium model of small open economy with heterogeneous agents, incomplete market, endogenous fiscal policy and sovereign default risk. We show that the model can explain the links among business cycles, fiscal policy, dynamics around default episodes, sovereign interest rate and default risk for these emerging countries.

Shang, Shengwu, University of Nebraska at Lincoln

Ratio of Ratios Estimator for the Treatment Effects on Positive Response Variables in Nonlinear Models

Abstract: The difference in differences (DID) estimator is one of the most popular tools for applied research in economics to evaluate the effects of public interventions and other treatments of interest on some relevant outcome variables. However, it is well known that the appealing of DID estimator is lost when it is applied to nonlinear models. This article considers a ratio of ratios (RR) estimator for the treatment effects on positive response variables in nonlinear models. RR makes at least two contributions to the literature: first, it is much easier to implement than some previous attempts; second, we do not specify any functional form for the condition mean function-only require that it is positive.

Shen, Leilei, Kansas State University

Skills Matter: The Effects of Value-added Imports on Wages, Employment

Uncertainty, and Inter-Occupational Mobility

Abstract: This paper contributes to discussions regarding how degree of routineness and skill levels determine the effects of exposure to value-added trade on U.S. labor market outcomes. We focus on workers aged 24–55 years (prime-aged workers) to study how value-added trade flows explain the polarization of wages and the degree of uncertainty in labor outcomes in the U.S. economy. Three main approaches are used to show that the interplay between routineness and skill level is essential in explaining the effects of U.S. exposure to value-added trade flows. First, we find that occupational exposure to value-added imports has heterogeneous effects on the wages of U.S. workers with different skill levels within each routineness group. An increase in exposure to imports of final goods from middle-income countries has the largest significant negative effect on the unskilled, prime-aged workers in occupations with intermediate routineness, which is a main driver of polarization of wages in the U.S., whereas the effect for skilled workers is insignificant within the same routineness group. Second, we examine the impact of exposure to value-added trade on the uncertainty of being unemployed for each worker while controlling for their skills. We show that an increase in exposure to value-added imports will raise the likelihood of being unemployed for unskilled, prime-aged workers regardless the types of trade flows, whereas the uncertainty related to unemployment for skilled, prime-aged workers is only related to the final goods imported from high-income countries. In addition, we are also curious about the effect on wages when workers have trade-induced occupation switches. Our results suggest that the cost on wages from occupation switches are negative and significant for unskilled, prime-aged workers in occupations that evolve with the most-routine tasks. Skilled, prime-aged workers do not experience significant wage loss when they switch occupations.

Smith, Andrew, Federal Reserve Bank of Kansas City

Does Communicating a Numerical Inflation Target Anchor Inflation Expectations? Evidence & Bond Market Implications

Abstract: High-frequency empirical evidence suggests that inflation expectations in the United States became better anchored after the Federal Reserve began communicating a numerical inflation target. Using an event-study approach, we find that forward measures of inflation compensation became unresponsive to news about current inflation after the adoption of an explicit inflation target. In contrast, we find that forward measures of nominal compensation in Japan continue to drift with news about current inflation, even after the Bank of Japan adopted a numerical inflation target. These empirical findings have implications for the term structure of interest rates in the United States. In a calibrated macro-finance model, we show that the apparent anchoring of inflation expectations implies a lower term premium in longer-term bond yields and decreases the slope of the yield curve.

Song, Yaxiang, University of Kentucky

How Does Public Education Spending Affect Household Education Spending in China?

Abstract: In this paper, I use China Family Panel Studies (CFPS) to examine the causal relationship between government spending on education and household private expenditure on education. A novel dataset containing information on government officials is used to exploit variations on their terms and I use the time left in their administration as an instrument for public education spending. The panel structural of CFPS also allows me to use variations both across provinces and over time. The IV estimates show there exists a negative response for households education spending to government education spending and rural households are more sensitive to increasing government education spending.

Sun, Chen, University of Kansas

Determinants of Survivals of Home Mortgage Loans

Abstract: This paper studies the single-family housing mortgage loan market in five states. We propose and estimate a competing risk copula model with a full sample of 43,105 loan-level data of 10 years. We find evidence suggesting nonlinear dependence between prepayment risk and default risk, while both the signs and magnitudes of dependence correlation vary across states. The credit score is adversely correlated with default risk. Meanwhile, the debt-to-income ratio and loan-to-value ratio are positively correlated with default risk. Loans with higher mortgage initiation interest rate will exhibit higher marginal default risk and marginal prepayment risk. Such results make the mortgage interest rate an influential factor of survival prediction. Besides, we also check the prediction performance of our model, the average accuracy rate of overall survival periods is around 70% for all the states. Lastly, we conduct a sensitivity analysis of loan initiation characteristics.

Sun, Yuzheng, Amazon,

Economists in Tech (Amazon)

Abstract: Economists are becoming increasing popular among tech firms. Amazon is a pioneer in hiring Economists and has more than 170+ Economics PhDs working for it, making it the largest Econ department in the world. I'll talk about (1) in general, what do economists do at Amazon; (2) my experience from Academia to industry; (3) how my PhD training helped and what I wished that I have learned in school.

Tang, Biyan, University of Massachusetts Dartmouth

The Predicting Power of User-cost Spread for Chinese Economics Recession

Abstract: The predicting power of yield curve slope or the yield spread is well established in US or Euro countries since 1988. However, the literature has less cover on the yield spread on predicting emerging markets or Chinese economy. This paper aims to provide a different leading recession variable for Chinese economy, the user-cost spread, the difference of the opportunity

costs of holding treasury bonds of different maturity. Traditionally, the yield spread can be a good indicator for predicting recession. In this article, we argue that the user-cost spread based on the Divisia monetary aggregate, will have strong correlation to the recession indicator provided by the OECD.

Tang, Sarah, Suffolk University

Energy Price, Investment and Business Cycle

Abstract: This paper investigates the asymmetric impact of energy price shock on US aggregate economy from 1945-2015. Empirically, we present the asymmetric impact of energy price on aggregate output, consumption, investment and employment through a structural vector-autogression (SVAR) model, incorporating a hidden Markov process following Hamilton's region-switching model. Incorporating Markov-switching model into SVAR allows us to capture the non-linear asymmetric response of aggregate variables to energy price shock. Theoretically, we propose a dynamic stochastic general equilibrium (DSGE) models embedded with both putty-clay and putty-putty investment. With the presence of putty-clay investment, the proposed DSGE model is able to reproduce the asymmetric effect of energy price on aggregate economy. Last, the role of putty-clay investment is empirically evaluated through indirect inference estimation routine. Estimation of the structural parameter, the proportion of output produced by putty-clay investment, supports a significant role for putty-clay investment in explaining the asymmetric effect of energy price shock.

Wang, Cong, Jinan University

Monetary Policy, Bank Liquidity and Risk-Taking

Abstract: This paper examines the effect of banks' liquidity risk on risk-taking behavior of Chinese banks, and provides evidence for a risk-taking channel of monetary policy operating through bank liquidity. Using bank-level panel data from 123 Chinese commercial banks during 2003-2016, we find that banks facing lower funding liquidity risk will be encouraged to take more risk. Moreover, loose monetary policy leads to more aggressive risk-taking by reducing the banks' liquidity risk, namely a liquidity risk-taking channel of monetary policy. In addition, banks with high capital adequacy ratio are more willing to take risks when their liquidity risk decreases, and banks act more prudently after the financial crisis. These findings suggest that authorities should give full consideration to the influence of the monetary policy on bank risk-taking through bank liquidity channels.

Wang, Lin, Securities Regulatory Commission of China

Does 'Irrationality' Increase Inconsistencies Between Subjective and Objective Risk Tolerance?

Abstract: Investors' risk tolerance is crucial in the formulation of suitable financial advice.

However, there is a phenomenon that cannot be ignored in reality: investors' subjective risk tolerance (self-perceived risk tolerance) may be different from their objective risk tolerance (risk tolerance shown by investment behavior). Using a unique Chinese A-share individual investor questionnaire survey data, this paper investigates the relationship between investor irrationality and this inconsistency. First, we have clearly defined and measured the difference between the subjective and objective risk tolerance of investors. Second, we have measured the irrationality degree of each investor and found that irrationality could increase the inconsistency between subjective and objective risk tolerance. In addition, the more frequently investors trade, the more stocks they hold, the higher the investment return of the previous year, and the greater proportion of the house in the total assets of the family, the stronger the influence is. The research is helpful to further understand the decision-making process of investors and supplement the relevant research in the cross-field of finance and psychology.

Wang, Qun, Dalian University of Technology

Health Service Use and Catastrophic Expenditure among the Elderly with Chronic Disease in China Using CART Analysis

Abstract: Background Chronic conditions represent more than 70% of all deaths globally. Equity in health service use and catastrophic expenditure (CHE) due to chronic diseases have attracted much attention among researchers. These studies usually adopted traditional approaches to equity analysis (considering one source of inequity at once). However, in the framework of intersectionality, social disadvantage arises from interrelated and intersecting social determinants. Methods We used the third wave (2015) of China Health and Retirement Longitudinal Study (CHARLS) data. CHARLS is a longitudinal household survey conducted among the adults aged 45 and older in 28 provinces of China. The total number of sampled respondents in 2015 was 20,907. Any health service use was defined as either using outpatient or inpatient service due to chronic diseases. CHE was defined as the share of household out-of-pocket health expenditure caused by chronic diseases in relation to household non-subsistence expenditure once exceeding 40%. We used classification trees (CART) (a popular machine learning and data mining method) to explore interactions between different social determinants and their impacts on health service use and CHE among respondents with chronic diseases. Results 14,300 respondents (equivalent to 68.4% of all respondents) reported at least one chronic disease. Among them, 3,770 sought outpatient care, 2,449 sought inpatient care, and 9,322 did not seek any inpatient nor outpatient care. CART analysis showed that groups not likely to use services were those aged less than 65 years with one chronic condition, those aged more than 65 years with lowest SES, and those aged more than 65 years with lower SES living in western and middle China. While groups more likely to suffered CHE were those seeking outpatient and inpatient care with more than one chronic condition and lowest SES, those seeking inpatient care with lowest SES aged more than 75 years, and those seeking outpatient care with lowest SES not married aged more than 75 years. The overall agreement rates for the trees of health service use and CHE were 82% and 90%, respectively. Conclusion This is one of the very few studies applying intersectionality theory in China. Relying on CART analysis, we identified a set of complex interactions not apparent using traditional equity analysis methods. We suggest the government that special considerations should be given to those households with the interacted features not likely to seek care and/or more likely to suffer CHE due to chronic diseases.

Wang, Qunyong, Nankai University

Price Limit and Information Flow: Evidence from RMB Onshore and Offshore Markets

Abstract: Most research about price limit focus on single stock market. In this paper, we study the effect of the price limit on information flow between two markets: the RMB onshore markets and offshore markets. The average of daily trading band of the RMB exchange rate is relaxed up to 1% from 0.5% from April 16, 2012, and further to 2% from 1% since March 17, 2014. This provides a good natural experiment for studying the effect of information flow on information flow. We extend the multivariate GARCH by adding policy variable in the mean and variance equations, and we use the 5-minitue high-frequency prices. We find that the information flow become stronger after relaxing the price limit, but there is asymmetric effect between the onshore and offshore markets.

Wang, Tingsi, University of Tennessee

Environmental Effects of Import Competition from China in the United States

Abstract: The goal of this chapter is to investigate the relationship between import competition and environmental performance. We examine how the pollution emissions in the US responded to import competition from China between 1990 and 2007. US manufacturing imports from low-income countries are growing rapidly since 1990, with China accounting for the largest growing share. We here focus on the environmental outcome of import competition. We use the data from EPA's Risk-Screening Environmental Indicators (RSEI). RSEI model estimates not only pounds released but also toxicity. Toxicity is a way to measure the hazard of a chemical, which provides a better measurement of the damage caused by pollution. The primary measure of import competition is the change in the import exposure for US manufacturing industry over 1990-2007. A concern by using this variable for the estimation is that the change in import competition could be caused by unobserved industry demand shocks, which result in an endogeneity concern. To identify the causal effect of import competition on the environmental performance of manufacturing industries, we follow the spirit of Autor, Dorn, and Hanson (2013) by using the contemporaneous change of Chinese import competition in the other eight developed countries. We first investigate how import competition from China impacts pollution in the US at the industry level. Results suggest that there are 35.7 million and 82.9 million pounds in emission reduction over 1990-1999 and 1999-2007, and there are 0.714 trillion and 2.29 trillion units in hazard reduction over 1990-1999 and 1999-2007 resulting from the rise in import competition from China. We also examine the variation across commuting zones (CZ) to explore the effects on the local market. The result shows that import competition from China has no significant impact on pounds released and hazard in CZ level. This paper contributes to existing literature that investigating the relationship between international trade and environment. Most empirical works examine the impact of trade liberalization on pollution in pounds measurement and at the industry level. We, here, focus on the impact of import competition from China on the environmental performance at both industry level and commuting zone level. By analyzing at the industry level, we can

investigate changes in relative pollution emissions across sectors with different level of import competition. By focusing on cross-region variations in the CZ level, we can evaluate the demand effects in local labor markets.

Wang, Wenting, Iowa State University

The Impacts of China's Soybean Policies on World Soybean Price and Price Variability

Abstract: Over the last decade, a series of fundamental changes took effect on China's soybean markets and have drastically changed the dynamics of the world soybean market. In order to bolster the farm income, China established the minimum government procurement price for soybean in 2008, implemented the deficiency payment policy in 2014, and introduced direct subsidies in 2016. These policies led to a considerable rise in domestic price and a continuously increasing demand for soybean imports. While earlier papers have examined the impacts of domestic agricultural policies on the world commodity prices (e.g., Martin & Anderson, 2011), relatively little has been done to the impacts of China's soybean price policies. Although there has been wide recognition of the extent to which one nation or region achieves price stability at the expense of instability to others (e.g., Tadasse et al., 2016), there is no quantification analysis of the effects of national policies on the world price variability. This paper fills in these gaps by evaluating the impacts of China's soybean price policies on world soybean price and price variability. This paper uses a nonlinear commodity market model to assess the impacts of recent policies on the world soybean price and price variability. The empirical analysis is based on an aggregate structural econometric model of the China soybean economy and its link to the rest of world. This paper defines the one-commodity, two-region model estimated with 3SLS approach. The Autoregressive Distributed Lag (ARDL) modelling framework is employed to analyze the impacts of China's soybean policies on the world price. The analysis uses monthly data covering the period January 2000 through June 2018 from various sources including USDA WASDE database, China Statistical Yearbooks, China Grain Yearbooks, China customs database, etc. We found that the world price will rise by an average of 0.116% for every 1% increase in soybean imports in China since the implementation of soybean market policies in November 2008. Meanwhile, the analysis demonstrates that the higher the degree of intervention to the domestic market, the greater the impact on the international price. The impact of the temporary purchasing and storage policy is more significant than the subsidy policy. Besides, as a large trading country, China's agricultural market intervention will increase the volatility of the international price by affecting the trade volume. The stabilization effects of domestic intervention are offset by the increased fluctuations of international price.

Wang, Xiaohan, Stony Brook University

The Role of Defaulted Debt Level for Renegotiation: Bygones No Longer

Abstract: Sovereign default episodes conclude when the country successfully renegotiates with its lenders the structure of its outstanding debt. The resulting recovery level is essential for assessing ex-post losses to lenders and the welfare consequences of default for the sovereign. Using a comprehensive dataset on restructuring events, I show that recovery is increasing in the level of

debt at the time of default. I then argue that the canonical model used to evaluate such episodes is at odds with this salient feature of the data. I point to the assumption driving this limitation and offer a parsimonious alternative, which resolves this disconnect with the data while preserving other desirable features of the setup. I use the extended model to quantitatively revisit the recent default episode in Greece and to predict the extent to which other European "periphery" economies could have reduced their debt burdens, via default and renegotiation.

Wang, Xue, Southwestern University of Finance and Economics

Network and Spillovers of Sector Index Returns in China Stock Market

Abstract: The connectedness of sector index returns has great impact of the stock market performance. Using the daily data of 18 sector indexes during 2007- 2017, this paper explores the network and spillovers among the sector index returns in China stock market. We combine the Directed Acyclic Graph (DAG) and Structural Equation Model (SEM) methods for the first time to analyze the structure and intensity of the contemporaneous network. Based on the results of DAG, we improve the spillover index method (DY Index) proposed by Diebold & Yilmaz (2012, 2014) and analyze the direction and strength of the spillover effect. Moreover, we further apply the Recursive Variance Decomposition to analyze the time-varying characteristics of spillovers. The results show that: the structure and intensity of sector index returns contemporaneous network are consistent with upstream and downstream relationship of the entity industries. The long-term sector index returns spillovers has significant difference compared with contemporaneous network, which is mainly affected by the economic fundamentals. The dynamic spillover index (DSI) have exact the opposite trend to the Shanghai Stock Index (SSI). The decline of the dynamic spillover effects is ahead of the rising of the SSI and when the DSI drops to the lowest point, the SSI reaches its peak point at the same time. In the prosperous phase of stock market, the sector indexes yield information spillover effects tend to decline and the impact on the investment risk become weak. While the stock market is in downturn period, the information spillover effects are remarkably enhanced, which causes the risk conduction moving more quickly. Our study has important practical significance for stock market investors, securities market regulators and macroeconomic policy makers.

Wang, Yan, Stony Brook University

Labor Market Segmentation, Financial Constraints and Economic Growth in China

Abstract: We construct a growth model that can capture the high growth rate since the early 1990s in China. The high growth rate is powered by the huge increase in urban labor supply because of rural-urban migration, and the emerging private enterprises that absorb the large amount of migrant workers. So far, this growth experience has occurred regardless of highly segmented labor markets, where rural immigrants are limited to privately owned firms that face limited access to financial sources. After several decades' high growth, China's former developing path may not be sustainable if China continues to set limits to labor mobility across sectors and if financial access by privately owned firms continues to be limited, in addition to the additional problems coming from the rapid aging of its population. We evaluate in a quantitative two sector model with

segmented markets and financial frictions the prospects for China's future growth under different policy scenarios.

Wang, Will, Microsoft,

Double Logit Search and Rank Optimization

Abstract: We study an online search environment with partial product information and consumer product choices based on partial or full information. We reformulate consumer choices as a "double logit" demand system based on Weitzman (1979)'s optimal search solution. We derive the optimal rank order that maximizes consumer surplus. Finally, we estimate the double logit demand with detailed search logs data and conduct counterfactuals based on our optimal ranks. Our proposed ranking improves consumer surplus by 31% of a standard deviation in product utilities from the average random ranking.

Woo, Wing, University of California at Davis

The Thucydides Trap in Sino-US Relations and Southeast Asia's Struggle to Stay Neutral: How Can Economics to Ensure Good Outcomes

Abstract: I will discuss these questions: (1) Is war between America (the fading dominant power) and the rising brash power (China) almost inevitable, e.g. John Mearsheimer (2001), Graham Allison (2017)? (2) Are the Sino-US trade war and the pursuit of Huawei as rogue trader the opening shots? How to stop the economic conflicts in order to prevent the escalation to war? (3) How can Southeast Asia (SEA) make its neutrality acceptable to China and America? What is the economic component of the SEA strategy?

Xia, Liying, Shanghai University of Finance and Economics

Equal Rights of Residents for Children's Education: An Evaluation of the Real Estate Policy Intervention

Abstract: Unlike in US or some developed countries, children could to go the nearby school only when their families have hukou and property in China. And more and more parents would like to buy an apartment nearby the high-quality schools, and the price of school estate became more expensive than non-school estate. Guangzhou government imply the "Equal Rights of Residents" policy to guarantee the children of tenement could also go to the nearby school. We take the "Equal Rights of Residents" policy which imply on July 17,2017 as a natural experience, and study the policy effect on housing price. By analyzing the data by DID and RD, we find this policy cannot drive the housing price down but could reduce rate of the growth of housing price, and also cannot influence housing rental market.

Xiao, Qiongqi, Chinese Academy of Fiscal Sciences

Audit Committee, Insurer's Characteristics and Default Risk: Evidence from U.S. Property-Liability Insurers

Abstract: This paper examines the impact of audit committee characteristics and insurers' characteristics on default risk using a sample of 455 U.S. stock property liability insurer-year observations. We find that higher proportion of financial experts on the audit committee decreases default risk. We also find that the number of audit committee meeting each year increases default risk. Our explanation is that high frequency of audit committee meeting limits opportunities for audit committee members to exercise efficient monitoring over information transparency. The evidence also shows that insurers' characteristics (leverage risk, investment risk and underwriting risk) are positively related to default risk. We find that the enactment of Sarbanes-Oxley Act increases the default risk by 8.5 percentage points significantly. A possible explanation is that there were more catastrophic events after SOX. We also find that the effects of the audit committee characteristics and insurer's characteristics on default risk are different post SOX and during the period of Financial Crisis of 2007-2010. The results indicate after the enactment of SOX, the deleterious impact of additional leverage risk (investment risk) is higher (lower) post SOX. The evidence shows that the harmful effect of leverage ratio, underwriting risk, and Geographic Herfindahl Index on default risk is more severe during the Financial Crisis. Finally, the helpful effect of financial experts on the audit committee and reinsurance on default risk is higher during the Financial Crisis.

Xie, Ziqi, Tulane University

How Did Dividend Tax Reforms Affect the Stock Market? Evidence from China

Abstract: On June 13, 2005, the Ministry of Finance and State Administration of Taxation of the People's Republic of China jointly issued a document (Caishui 2005 No. 102) to lower the dividend tax rate from 20% to 10% for all investors immediately. Following this document, in 2012, another joint document (Caishui 2012 No. 85) was released, changing the single tax rate to differentiated rates system starting in 2013. Under the new document, for investors who hold a stock that distributes dividends, they have to face a 20%, 10%, and 5% tax rate if they own the stock for less than one month, between one month and one year, and over one year, respectively. The goal of this paper is to compare these two policy changes and examine whether they have achieved the aim of the government or not. I chose the China Stock Market and Accounting Research (CSMAR) as the primary data source for this study. The results indicate that by lowering the dividend tax rate could temporarily decrease the turnover rate and trading volumes and increase stability, in the long run, the effect is not significant enough. The 2005 policy change led to a 15% drop in turnover rate and 8 million shares decrease in trading volumes. However, the 2012 reform has nearly contrary results. Also, previous literature [Murphy (1999), Smith and Watts (1992)] point out that executives have incentives to increase dividends distribution if part of their compensation is from dividend yields. Besides, in China, state-controlled enterprises have solid performance since China's transition to the market economy [Lin et al. (1998)]. Therefore, I further split the samples into subsamples based on the share percentage held by top executives and the government. The results from this paper show that firms that are more government controlled or

have more executives who own a high percentage of shares have lower trading volumes and turnover rates. Investors are more likely to invest in firms with government background, and executives would distribute more to avoid personal income tax. This paper contributes by extending the literature on estimating China dividend tax reform on trading volumes and turnover rate. Previous studies mostly focus on the effects of policy changes on dividend distribution, stock prices, and investors' reaction. Second, this paper provides an intuitive comparison between lowered dividend tax rate policy and differentiated tax rate policy, which sheds light on further policy making.

Xu, Huiwen, University of Rochester

Association of China's National Essential Medicines Scheme with Village Doctors' Turnover Intention: the Mediation Effect of Job Satisfaction

Abstract: Objectives To ensure the affordability and accessibility of basic medicines, Chinese government introduced the National Essential Medicines Scheme (NEMS) as part of its ambitious health reform since 2009. Previous studies found that NEMS led to reductions in drug revenue, inpatient medication, and health expenditures; but also resulted in unintended consequences such as uptake of inpatient care, reduced income and lower job satisfaction for healthcare providers. The effect of NEMS on the stability of primary care providers, however, has not been examined previously. Using a national survey data, we examined the implementation of NEMS and its association with turnover intention of village doctors. We also investigated the mediation effect of job satisfaction on this association. Methods In 2013, we conducted a cross-sectional survey on all village doctors in four counties (Xinjian, Pingchang, Maiji, and Hailun), using a multistage cluster sampling method. A structured questionnaire was constructed to collect village doctors' social-demographic characteristics, subjective opinion on the implementation of NEMS, job satisfaction (ranging 1-6, higher score indicates better satisfaction) (Spector 1985), and turnover intention (ranging 1-24, higher score indicates stronger intention) (Michael and Spector 1982). Linear mixed model with county random effect was conducted to examine the association of NEMS and turnover intention, while the seemingly unrelated regression was implemented to test the mediation effect of job satisfaction. Results Among 1,637 village doctors who filled the questionnaire (response rate of 88.5%), we included 1,490 village doctors with complete data. Most of doctors were male (91.3%), aged 50 years or less (64.0%), and were licensed as village doctors (76.9%). The turnover intention and job satisfaction averaged 11.6 (SD=4.4) and 3.7 (SD=0.6). The major concerns of NEMS included drugs shortage (39.7%), inadequate coverage (36.0%), delayed delivery (35.2%), and increased price (25.9%). Multivariate regression suggested that increased price (β=0.61, 95% confidence interval (CI): 0.09, 1.12) and delayed delivery (β=0.60, 95% CI: 0.13, 1.06) were significantly associated with stronger intention to quit job. Job satisfaction explained 22.5% and 15.1% of the associations of delayed delivery and increased price with turnover intention, respectively. Conclusions During the early implementation of NEMS, village doctors reported concerns related to increased drug price and delayed delivery. These factors were associated with stronger turnover intention, and were mediated by job satisfaction. To avoid the unintended consequence on the stability of health workforce, policy makers need to strengthen the price control and guarantee timely delivery of essential medications to village doctors.

Xu, Xiaocong and **Zhang, Junfu**, Clark University

The Local Multiplier Effects of International Trade: Theory and Evidence from China

Abstract: This paper estimates the local multiplier effects of export on GDP and employment at the city level in China. Based on Eaton and Kortum (2002), I first build a two-sector multicity general equilibrium model to show the mechanisms through which the local multiplier effects work. I show that the export-GDP multiplier is determined by five sufficient statistics: the share of labor in local production, the within-city expenditure share in tradable sector, the share of other cities' expenditure on tradable goods produced in the city, the share of tradable intermediate inputs in local production, and the share of consumption expenditure on tradable goods. In addition to these factors, the export-employment multiplier also depends on local employment and the wage elasticity of employment. Using 1999-2014 city level panel data, I find that every 1000 yuan of value added exports in the city generates an additional 213 yuan in local GDP. Moreover, a one million yuan increase in gross exports creates 3.1 jobs, and for every 100 new jobs in the tradable sector, 54 new jobs are created in the non-tradable sector. To address the endogeneity of changes in local exports, I use an instrumental variable that combines the changed tariffs on Chinese goods and cross-city variations of exporting industries. Decomposing GDP by sector, I find that exports have little effect on GDP in the agricultural sector. The export-GDP and export-employment multiplier effects are heterogeneous across cities. Finally, I estimate the export-GDP and export-employment multipliers for each city in China using the formulas from the theoretical model.

Yang, Jie, Yunnan Normal University

The Impact of Cross Border Employment on Workers' Income in Border Areas—Based on Propensity Score Matching Method

Abstract: Since the 1980s, with the reform of China's rural land policy and the acceleration of urbanization and industrialization, a large number of surplus rural labors began to transfer to non-agricultural sectors on a large scale. The large-scale population flow, at the national level, constitutes the leading factor of the structural changes of population, urban and rural areas and regions. After 2010, based on the continuous expansion and opening of China's border trades, cross-border (national) mobile employment began to become a new trend of population flow in border areas. Based on the convenient geographical conditions of border trade areas, a large number of working-age labor forces began to continuously go abroad and choose neighboring countries or regions to engage in business or other ways of working to obtain labor income. In this paper, based on the border of the floating population behavior perspective to explain the microscopic theory of cross-border flows employment framework, on this basis, we explored the impact of cross-border flows employment on workers' income using the Propensity Score Matching Model (PSM) and the national social science fund researching microscopic household survey data in the border areas of Yunnan province. The study found that cross-border mobile employment increased workers' income levels. To be specific, compared with other employment methods, the monthly wage income of cross-border migrant workers increased by 1747.97 Yuan on average, which was basically stable in different matching methods and other robustness tests.

The research results have certain policy implications for improving employment level and workers' income level in China's border areas.

Yang, Xi, University of North Texas

The Impact of Paternal Migration on Child Non-cognitive Skills: Evidence from Rural China

Abstract: While a large literature has focused on the impact of parental migration on child cognitive development and health outcomes, very little is known about the role of the effect of parental migration on child non-conative development. By using the Gansu Survey of Children and Families (GSCF), we model the non-cognitive production function for adolescents using an augmented value-added model and adopt an instrumental variable method that takes account of the endogeneity of parental migration status. We find that father's migration has a significant negative effect on a child's non-cognitive development, regarding internalizing and externalizing behaviors. These results are robust with different specifications for production function, alternative measurement of father migration, and alternative measurement of child's non-cognitive skills. Furthermore, we provide insights into the relative importance of financial input and time inputs in determining the effect of father's migration on child's non-cognitive skills. Results in this paper highlight that father's presence is important in promoting child development, contributing to current literature which emphasizes the role of the mother in determining child development.

Yang, Yonghua, Yunnan Normal University

International Fragmentation of Production and China's Manufacturing Export Sophistication: Empirical Analysis on China's 26 Manufacturing Industries Data

Abstract: This paper firstly constructs an index of export Sophistication, based on Rodrik's (2006) method of measuring product Sophistication, and measures China's export Sophistication of 26 manufacturing industries. Secondly analyzes the influence of international fragmentation of production on manufacturing and put forward some theoretical hypothesis. Then constructs model according to the hypothesis and analyzes empirically based on panel data of China's manufacturing. Results show that international fragmentation of production promotes manufacturing export Sophistication by processing trade; Capital investment has obvious influence on the export Sophistication of resources or labor-intensive industries, well human capital plays an important role among capital or technology-intensive industries. While the effects of labor productivity and intramural expenditures on S&T activities on export Sophistication are not obvious.

Yang, Xiaoming, University of Nebraska at Omaha,

How and When Do Headquarters-Subsidiary Interactions Carve Institutional Effects on Subsidiary Initiatives of Emerging MNCs?

Abstract: We revisit the relationship between headquarters and subsidiaries and develop a new

model for releasing the subsidiary initiative, a significant form of corporate entrepreneurship activities in a host country. Drawing upon institutional theory and corporate entrepreneurship theory, we argue that mutual trust between headquarters and subsidiaries serves as a mediating mechanism linking informal institutional distance and subsidiary initiatives. Meanwhile, we propose that communication effectiveness between headquarter and subsidiary plays as a moderator upon such relationships. A sample including 299 multinational enterprises with headquarters in China and subsidiaries overseas largely support our model on subsidiary initiative. Our research shows that communication between the headquarters and the subsidiary is actually a two-edged sword. Communication effectiveness positively moderates the relationship from informal institutional distance to trust but negatively moderates the relationship from trust to subsidiary initiative.

Ye, Xian, Jinan University

Does Golden Parachute Mitigate Stock Price Cash Risk? Evidence from Listed Firms in China

Abstract: There is an increasing number of Chinese firms adopted Golden Parachute Provision (GPP) in the face of a competitive market for corporate control since the event of Baoneng's hostile takeover towards Vanke Group in the 2015 year. Previous research suggested a governance mechanism that GPP may harm shareholder, as GPP hide the disciplinary behaviors of executives from the market for corporate control. However, literature suggested that GPP benefit shareholder in the long-run, as GPP bring about stable corporate environment for executives. To capture GPP in China, this paper extracts a unique and hand-collected dataset from all charters issued by Chinese listed firms. By using a panel data on A Type-share listed firms in China from 2005 to 2017, this paper empirically tests the influence of GPP on crash risk at firm level. We employ panel PSM-DID regressions, controlling for other variables. The estimation results suggest that when a firm adopts GPP, it decreases the stocks' crash risk. The conclusion holds after a series of robust tests. Such effect is more significant for firms registered in the lower regional investor protection. Moreover, the results show that the negative effect of GPP on crash risk is more significant after 2015. We also find this significantly negative effect for non-state enterprises, firms which the largest shareholder with lower ownership, firms with lower institutional ownership, and firms with the lower degree of asymmetric information, but insignificant or even positive effect in contrast. In the further study, we find that GPP adopters have better governance overall, it may decrease stock price crash risk by mitigating violations of management and firm, and improving corporate social responsibility (CSR), suggesting that the long-term valuation and stable management policy are the objective of firm with GPP in company's charter so that decreasing stock price crash risk. This paper identifies a mechanism of how to improve corporate efficiency and market for corporate control in China securities market. Our findings enrich the literature regarding antitakeover provisions and the market for corporate control under China's special institutional background, and provide new perspective for "Law and Finance" at firm level.

Yip, Chi Man, University of Calgary

Labor Market Dynamics in Slumps: What, So What, and Now What?

Abstract: This paper revisits the long-standing, yet still unanswered question: how does the labor market behave in slumps? I estimate the causal effects of negative labor demand shocks to answer the following questions. In addition to the estimation of the wage and the unemployment effects, this paper uncovers the processes by which these effects operate: Whose wages are sticky, and whose are not? Do wage adjustments operate through the renegotiation during contract renewals or new contracts during hiring processes? Does unemployment fluctuate because of variations in job separation rates or job finding rates? Answering these questions enhances our understanding of the functioning of the labor market and helps policymakers design labor market policies over business cycles. The debates on these unanswered questions are fierce partly owing to a paucity of conclusive empirical evidence on the causal effects of negative labor demand shocks. The identification of the causal effects of negative shocks from recessions is challenging. Often, there exist no definite arrival dates of recessions. Moreover, the severity of shocks from recessions is usually vaguely measured by the magnitude of the decline in economic activities such as unemployment rates, not by the shocks themselves. Once recessions arrive, they are pervasive. Hence, this literature focuses mainly on the correlations between recessions and their labor market outcomes. To establish the causal relationship, I utilize an environmental policy as a medium to lend insights as to how negative labor demand shocks shape the labor market. These shocks could arise from oil crises that lead to the 1973 recession, the 1980 recession, and the early 1990s recession in the United States but could be driven by policy shocks such as carbon tax and other environmental regulations. This paper exploits a unique opportunity provided by the introduction of a revenue-neutral carbon tax policy in British Columbia (BC). Unlike recessions, the arrival date and the stringency of the shock are definite. A carbon tax of CAD$10 per ton of carbon dioxide equivalent emissions was introduced on July 1, 2008, and the tax rate increased by CAD$5 each year until 2012. Meanwhile, the policy shock in one labor market does not imply they will affect others, providing control labor markets that are likely unaffected by the policy. Hence, BC's carbon tax provides a novel source of exogenous variation in the stringency of the shock and provides numerous control provinces that are unaffected by the shock to answer the research questions.

Yu, Chan, University of Texas at Austin

Gender Inequality and Trade Shock: Evidence from Chinese Import Competition

Abstract: I analyze the effect of import competition from China on gender inequality in US local labor markets. The initial industry distribution difference between men and women within manufacturing sector generates differential import exposure. I exploit the industry distribution differences and creates gender-specific import measure to account for differential import exposure across genders. I find that female workers experience more declines in manufacturing employment and wage in relative to their male counterparts. The losses in manufacturing labor outcomes are mainly born by low skilled female workers. In addition, outside manufacturing sector, male workers experience much more negative labor outcomes compared with female workers. The reverse effect in nonmanufacturing sector can be explained by the initial manufacturing concentration differences by genders. These findings are important not only because it predicts different mechanisms of labor adjustment between men and women towards trade liberalization, but also because they shed light on how industrial distribution difference between men and women

may explain for the recent slower convergence rate in gender wage gap since the 1990s.

Yu, Wenjing, Zhejiang University

Health Capital Impact Study on Rural Labor's Off-farm Employment: Evidence from China

Abstract: On the background of rapid urbanization, labor force is facing re-allocation, especially in rural area. Health capital and its effects on off-farm employment have received considerable attention in China. Quantifying the relationship between non-agricultural employment and human health is essential to understanding the impact of the human capital investment on job opportunity and income. Firstly, the improvement of health condition can prolong the human life expectancy and working time. Secondly, it is also an investment because health capital increase can enhance individual's working efficiency. This paper extends discussion of the relationship between health and job opportunity by using China Health and Nutrition Survey (CHNS) panel data from 2004 to 2015, based on Grossman's Health Demand model and Extended Mincer's Income equation. The main results indicate that health capital poses significant improving to off-farm income. Individual work type and income are found to be significantly positively related to job opportunities and this relationship is intensified by the effects of health conditions. Farmers with better health are more willing to go out to find jobs and the locations of their migrant employment tend to be more far away from home, which means they can attach more job opportunities. There is positive relation between the distance from working place to hometown and salaries. It is also found that compared with physical health condition, mental section draws more significant effect on income. In the short-term, the appropriate pressure on labor force has a weak positive influence while self-affirmation and optimistic expectations set a long-term effect to improve individual's future income significantly. Chinese government basically focuses on medical infrastructure investment to strengthen the residents' physical health condition, while mental health treatments are paid few attentions in rural area. Psychological social support or positive emotional guidance can be considered as a feasible way to achieve income increasing for rural residents. Overall, the results to some extent validate the relationship between the health and wealth.

Zang, Lijun, Zhejiang University

Migrants and Criminal Offense

Abstract: This paper investigates the casual relationship between migrant share and crime rate by using the balance panel data of 184 cities in 2000, 2005 and 2010, collected from the China Population Census, 1% National Population Sample Survey, annual city yearbooks, the annual reports on the work of People's Procuratorate in each city and the China City Statistical Yearbook. To deal with this potential endogeneity, we use the projected migrant share and ten years lagged doctors per capital as the instrumental variables of the migrant share, and applied the fixed effect-instrumental variables (IV) estimation method to explore the effect of migrants on crime rate. We find that there was no evidence that increase in the proportion of migrant leads to a significant rise in the crime rate. Moreover, the results of IV approach show that the expansion of migrants can reduce the crime rates to some extent, and every 1% migrant share will reduce about 3% of

prosecution rate.

Zax, Jeffrey, University of Colorado Boulder

The Huai River Boundary, Educational Attainment and Earnings: A Tale of Weather and Sex

Abstract: The literature estimating returns to education in China is extensive. However, as elsewhere, this literature struggles to address the potential endogeneity of educational attainment. This paper exploits the Huai River discontinuity and the exogeneity of residential location in pre- and early-reform China to construct a new instrumental variable for educational attainment. Educational attainment was significantly and negatively associated with temperature in areas where winter heating was limited. The effect of variations in educational attainment that are attributable to this temperature effect on earnings is much higher than conventional estimates of returns to education in China. These variations also have substantial effects on labor force participation.

Zeng, Fanqing, Jinan University

Structural Matching between Finance and the Real Economy and Economic Growth

Abstract: The analysis of finance serving the real economy mainly focuses on the allocation of quantity in recent years. We intend to re-discuss this subject from the perspective of structural matching between finance and the real economy. We sort and subtracts the financial structure and technical level of each province in China over the years, and calculates the matching degree between the financial structure and technical level of each province in each year, as an essential regressor to economic growth. The empirical results show that: 1) the GDP growth rate is significantly positively correlated with the matching degree index of financial structure and technical level, and the explain range of the matching degree index is stronger than the financial scale, financial structure, technical level and the intersection of financial structure and technical level; 2) "Catch-up Tactic" can only promote economic growth under the moderation effect of the matching degree index; 3) The proper matching of financial structure and technology level can promote capital deepening and innovation of technology as Channels to have a positive effect on growth. The empirical findings of this paper are still robust after treating endogeneity, using alternative measures of financial structure and real economy, or changing methods of matching. These empirical findings will help explain China's rapid economic growth under the conditions of the less-developed securities market and the new circumstances of altering motivation in growth path. It will also provide experience for broadening the government's policy portfolio for promoting development of finance and the real economy. in accordance with.

Zeng, Yong, University of Missouri at Kansas City

The Multifactor Term Structure of Interest Rates under Regime Shifts and Levy Jumps

Abstract: We study a tractable dynamic term structure models developed under jump-diffusion with Levy Jumps and regime shifts with time varying transition probabilities. The model allows for regime-dependent jumps while both jump risk and regime-switching risk are priced. Two types solutions, including (log-linear) approximation solution and exact solution for the term structure are obtained for an affine-type model under different conditions. For the approximate solutions, we further obtain the error bound. For the exact solutions, we further obtain closed form solutions to special cases. This is joint work with Shu Wu, Xiangdong Liu, and Chris Evans.

Zhang, Bing, Nanjing University

The Impact of T+1 Trading Mechanism on China Stock Market: negative overnight return perspective

Abstract: The T+1 trading mechanism is unique in the Chinese stock market. Unfortunately, the operation of the mechanism has many problems that are difficult to study directly. This paper innovatively proposes and proves that the overnight return can serve as a mirror of the T+1 trading mechanism, it could be used as a proxy variable for evaluating this trading mechanism. This paper finds that the overnight return of the Chinese stock market is significantly negative, whereas those under the T+0 trading mechanism, such as China stock index futures, warrants, Hong Kong stocks and major international indices, all have around 0 or positive overnight returns. T+1 trading mechanism has a greater impact on stocks with more divergent investor opinions, higher risks, more individual investors percentages, less liquidity, and higher arbitrage restrictions. This mechanism causes sharp declines in stock prices at market opening and distorts the price generation mechanism of stocks, featuring a longer bearish and shorter bullish stock market characteristics. The mechanism has exacerbated the stock crisis since 2015 and the effects of circuit breakers on stock markets and has generated losses for individual investors.

Zhang, Xuanyue, Chongqing University

The Impact of Household Income, Occupational and Demographic Structure on Agricultural Self-sufficiency of the Rural Household in China

Abstract: Agricultural self-sufficiency is an important portrait of the rural household livelihood, as well as the major indicator of the agricultural modernization and intensification in China. Based on 8970 rural households collected by China Family Panel Study (CFPS) in 2014 and 2016, this paper analyzes the agricultural self-sufficiency of Chinese rural household nowadays, which reflects the household livelihood issues in China's urbanization and agricultural modernization. We categorize the sample household according to its household income, occupational and demographic structure, meanwhile set out a systemic frame of the possible factors influencing the agricultural self-sufficiency. With the usage of descriptive statistics and econometric regression model, our empirical research has three main results. First, agricultural self-support is still the primary option for many rural households in China. Vast majority of the rural households have no way to escape the self-sufficient agriculture. Second, off-farm employment can't impel all the rural

households to evolve into the commercial agriculture. Inversely, most rural households become more self-supporting to meet the consumption needs. Finally, the pressure to feed the dependent family members is the obstacle for the rural households to participate in the modern agricultural commercialization. Household only containing those over 64 years old, occupying nearly 5% of the total sample, has the highest level of agricultural self-sufficiency, which reveals the severe situation of the aged in rural China, indicating the key point and difficulty in China's Poverty Alleviation. Although the outcomes of the rural household livelihood and agricultural production above avoid the urban slums and the related social issues possibly arising in China's agricultural transition and urbanization, they are also the main obstacles that limit the process of the agricultural modernization and intensification. How to increase the commercialization of agricultural product, and to promote the agricultural modernization and intensification is the momentous issue in China's social and economic development in the New Era. The results of this paper not only cast light on the current situation in rural China, but also provide the theoretical foundation along with the empirical evidence for China's urbanization and rural modernization. It propounds some significant policy suggestions involving the off-farm employment, the agricultural intensification, and the pension insurance for the migrant workers in China.

Zhang, Hong, Changsha University of Science and Technology

Research on Internalization Mechanism of Emission Reduction Cost in Supply Chain

Abstract: As the largest carbon emission country, China strives to achieve the goal of stopping the growth of greenhouse gas emissions by around 2030. The supply chain is the key to controlling carbon emission. Its emission reduction cost internalization can reduce carbon emissions from the source and improve the efficiency of supply chain emission reduction through emission reduction investment with less supply chain. The effect of its implementation is deeply influenced by the carbon emission quota of the government. Therefore, it is very urgent to research on the internalization mechanism of emission reduction cost in supply chain and design of government carbon emission quota, which has important theoretical and practical value. The paper aims at the three-level supply chain composed of suppliers, manufacturers and retailers, and builds stakeholder game model and centralized decision-making optimization model, and designs transfer payment contract to systematically research on the internalization mechanism of emission reduction cost in supply chain, and construct a carbon emission quota allocation game model between government and industry to design the carbon emission quota mechanism based on the government social welfare function.

Zhao, Ran, Beijing Normal University

Micro-Macro Antinomy ——Human Capital, Structure of Employment and Growth in China

Abstract: Micro-Macro antinomy ——Human Capital, Structure of Employment and Growth in China Du Yuhong, Zhao Ran (Institute of Educational Economics, Beijing Normal University,

Beijing,100875) Abstract: Although the importance of human capital for economic growth is widely recognized since Romer (1990) and Lucas (1988), there was also no consensus on both the significance of education's role in growth and the specific channels from which the growth effects of education arise. (e.g. Benhabib and Spiegel, 1994; Krueger and Lindahl,2001; Temple, 2001; Pritchett, 2006; Hanushek and Woessmann,2015; Li Lai,2016). According to Pritchett hypothesis, increases in measured educational attainment have done little to raise growth in less developed countries. Most empirical studies focusing on the effect of human capital on economic growth ignore the implying assumption that the educated labors undertake productive activities. A large majority of postgraduates tends to work in state sector rather than private sector where rent-seeking is rewarded. This may help shed a new light on the explanation of "micro-macro antinomy" that the private monetary return of education is high, while the effect of education in macro growth regressions seems small or even negative in the literature. This paper aims to explore (1) whether the differences between private and social returns of education in state sectors can contribute to an explanation of the "micro-macro antinomy" on human capital and economic growth in China; (2) the significance of "factor-accumulation" and "productivity-promotion" of different levels of education respectively and simultaneously during short-term and long-term. Based on our analysis, we have revealed several interesting results. (1) Once we control for this effect of government sector size on educational effectiveness, the seemingly unrelated regression (SUR) and system GMM estimation support that the effect of education in China was positive and significant. (2) Different types of education affect economic growth differently. Low skilled human capital contributes to Chinese growth via "factor-accumulation" while high skill human capital matters in the "productivity-promotion," both individually and simultaneously. (3) From the dimension of time, "factor-accumulation" for low skill human capital is only significant in short term while the "productivity-promotion" for high skill human capital is significant in both short and long terms. Key words: Human capital; Micro-Macro antinomy; Economic growth; GMM

Zhao, Shunan, Centre College of Kentucky

Semiparametric Estimation of Production Functions with Heterogeneous Prices

Abstract: In this paper we propose a model to estimate firm productivity and markups in the presence of heterogeneous output and input prices. We show that allowing heterogeneous prices solves the under-identification problem inherent in the standard methods to estimate production functions. The control function approach used to structurally identify the production functions and productivity is customized to our model. We apply the proposed model to the Chinese transportation equipment industry -- one of the most state-involved manufacturing industries -- during the 1998 - 2008 period. We assume that firms in this industry are monopolistically competitive in the output market and argue that state firms are favored due to their political connections resulting in lower input prices. Empirically, we find significant differences in the estimated output elasticity, productivity and markups between our model and an alternative model with homogeneous prices. Based on this we argue that without controlling for these price distortions, estimated output elasticity, productivity, and markups will be biased and inconsistent. Therefore, policy implications from these results may be misleading.

Zhao, Yue, Renmin University of China

Textual Learning: Tone Effects of Analyst Reports on Market Timing of Chinese Managerial Shareholder

Abstract: Based on 377,644 analyst reports of Chinese listed firms from 2006 to 2018, this study makes comparative analyses of predictive ability of several machine learning methods, including Naïve Bayes, logistic regression, neural network etc. Naïve Bayes, which proves to be the best method of forecast, will be used to measure the analyst report tone. Furthermore, this study examines (1) whether the textual information in the analyst reports is valuable to managerial shareholders besides general investor, and (2) how the relation between textual tone of analyst reports and the stock-selling behaviors of managerial shareholders varies depending on the corporate governance environments. In empirical studies, we find that the stock holdings that managerial shareholders reduced is negatively associated with analyst textual tone. We also find that: (1) the weakening of corporate governance will enhance the tone effects of analyst reports on market timing of Chinese managerial shareholder; (2) the concurrence of textual tone and analyst following is positively related to stock holdings reduction of managerial shareholders. Finally, it is found that certain textual characteristics in reports can provide the additional information to predict share-selling behaviors of managerial shareholders.

Zhou, Qiankun, Louisiana State University

Specification Tests for Time-Varying Coefficient Panel Models

Abstract: This paper provides a nonparametric test for the most commonly-used structure in panels, i.e., the homogeneity and stability of parameters. We first obtain the augmented residuals by estimating the model under the null hypothesis of homogeneity and stability, then run auxiliary time series regressions of these residuals on the regressors with time varying coefficients via sieve methods. The test statistic is constructed by averaging all the squared fitted values, which is close to zero under the null and deviates from zero under the alternative. We show that the test statistic, after being appropriately standardized, is asymptotically normally distributed under the null and a sequence of Pitman local alternatives as both cross-sectional and time dimensions tend to infinity. A bootstrap procedure is proposed to improve the finite sample performance of our test. Monte Carlo simulations indicate that the proposed test performs reasonably well in finite samples. We apply our test to the estimation of Environmental Kuznets Curve and reject the assumption of homogeneous and stable coefficients. In addition, we extend the testing procedure to test other structures on parameters such as homogeneity of time-varying coefficients or stability of heterogeneous coefficients.

Zou, Jian, University of Illinois Urbana-Champaign

Understanding the Peer Effects of Non-Cognitive Ability on Academic Outcomes

Abstract: By exploiting the random assignment of students to classes within a school and newly available datasets in China, we find positive peer effects of non-cognitive ability on academic

outcomes using linear-in-mean model. Specifically, we find positive peer effects of persistence and learning ability on Math and English test scores, but not on Chinese test scores in the first wave. Moreover, we find larger and significant impacts of peer personality on Chinese, Math, and English for students at 8th grade in the follow-up wave, which implies sustainable peer effects. We also find high-persistence students benefit from persistent peers in achieving academic outcomes but no evidence for low-persistence students. Two potential mechanisms are examined in this study: time allocation and peer grouping. While we do not find evidence on the mechanism that students spend more time on homework, we find evidence that students spend less time watching tv and playing video games as potential channels. Additionally, we find evidence on peer grouping mechanism for positive peer effects: mainly on grouping with "good" peers and some evidence on not grouping with "bad" peers.