

# Third-Year Paper Presentations

Date: Friday, December 7, 2018  
Location: 452 Snow

## TALK SCHEDULE



Will Duncan  
9-9:30 am

Pakistani trade policy: Non-tariff measures and political cronyism

Xiyuan Liu  
9:45-10:15 am

Tail-event driven varying connectedness of risk

Hoa Vu  
10:30-11 am

Health, immigration, and health care expansion

Kegan O'Connor  
11:15-11:45 am

Impact of nuisance laws on evictions



Caio Vigo Pereira  
2-2:30 pm

Optimal conditioning information with Google's search queries for portfolio management

Pixiong Chen  
2:45-3:15 pm

Functional-Coefficient Regression Model for investor sentiment and stock return analysis

Kun He  
3:30-4:00 pm

Comparison of supply-side inside money and demand-side total monetary aggregates as economy indicator at different frequencies in the Central Bank's transmission mechanism

Abdullah  
Alabdulkarim  
4:15-4:45 pm

Crude oil price shocks: Distinguishing between supply and demand shocks

## Third-Year Paper Abstracts

### Will Duncan

*Committee: Ginther, Tsvetanov, Slusky*

#### **Pakistani Trade Policy: Non-Tariff Measures and Political Cronyism**

This paper analyzes the impact that political power has on trade policy in Pakistan. In particular, it makes two contributions: an explanation of the impact of political power on the implementation of non-tariff measures (NTMs) and an analysis of the Grossman-Helpman model in a developing country where both NTMs and tariffs (TMs) are increasing. The paper shows that industries which are better organized, and have more political power, are able to obtain better trade protection. This is because those better organized sectors are able to obtain legislation for more frequent introductions of NTMs and a greater intensity of NTMs. Additionally, the paper demonstrates the applicability of the Grossman-Helpman model, heretofore applied in settings where NTMs and TMs are being used as substitutes, to a country where NTMs and TMs are being used for ever-greater protection in organized sectors.

### Xiyuan Liu

*Committee: Cai, Sabarwal, Barnett*

#### **Tail-Event Driven Varying Connectedness of Risk**

In this paper, I study the financial and economic factors that have effect on the risk connectedness under tail event. I propose a semiparametric measure to estimate and infer the risk connectedness in a high dimensional context, based on stationary and mixing time series. Methodologically, a variable selection method is utilized in a functional index coefficient model under quantile regression setting. With this method, I can include large numbers of financial institutions in my analysis and consider more potential factors that affect risk connectedness in my model. The simulation results show that my new methods of estimation and variable selection work fairly well.

### Hoa Vu

*Committee: Slusky, Ginther, Tsvetanov*

#### **Health, Immigration, and Health Care Expansion**

One in 17 people live in the United States is an unauthorized immigrant. Yet relatively little is known about this population's socioeconomic characteristics. This paper examines the health status of undocumented population by adopting a newly developed method that impute undocumented status in micro data surveys. Compared with natives and legal immigrants, undocumented immigrants are less likely in poor health or psychological distress. This difference is slightly enlarged over the past 20 years. I also use legal residences as a control group to study the impact of the expansion of Medicaid eligibility on self-reported health status of undocumented immigrants. I found no significant differences in health improvement for undocumented immigrants in expansion states.

**Kegan O'Connor**

*Committee: Ginther, Slusky, Tsvetanov*

### **Impact of Nuisance Laws on Evictions**

Third-party policing laws are policies in which police attempt to persuade or force third parties, such as landlords, to take some level of responsibility in preventing criminal activities. The most prevalent of which are nuisance property ordinances. These require landlords to regulate tenant behavior to eliminate behaviors which are classified as a “nuisance”, generally through enacting some form of an abatement program. The adverse effects of such laws have yet to be examined from an economic perspective. This paper seeks to discover how these laws may affect the levels of evictions in cities and counties in which they are enacted. Using eviction data along with ACS data from 2005-2016 a Difference-and-Difference model will be used to discover the laws impact using a selection of large US cities which have initiated the use of these law within the respective time frame. It is the aim of this paper to discover what effect if any these laws have on evictions with the end goal of extending it further in additional work with regards to their impacts on other factors, such as child maltreatment and neglect.

**Caio Vigo Pereira**

*Committee: Cai, Iwata, Sherwood*

### **Optimal Conditioning Information with Google's Search Queries for Portfolio Management**

This paper studies new sources of signals to be incorporated in a mean-variance framework for portfolio optimization. We assess the performance of unconditionally efficient strategies from Chiang (2015) using Google Trends as conditioning information, both in-sample and out-of-sample. Comparing with standard instruments used in this type of analysis, we show that Google Trends data may improve the risk-return trade-off. However, Google Trends signals are more volatile when used in weekly data. The motivation for this approach comes from the growing nowcasting literature that shows to be useful to forecast near-term values of economic indicators.

**Pixiong Chen**

*Committee: Cai, Sabarwal, Iwata*

### **Functional-Coefficient Regression Model for Investor Sentiment and Stock Return Analysis**

This paper considers functional-coefficient regression models to analyze whether investor's sentiment has predictive power to the aggregate stock return. We calculate the sentiment index from the survey conducted by the American Association of Individual Investors (AAII). By setting the regression coefficients to be a function of an arbitrary unknown form, we show that it significantly improves the predictive precision than that of GARCH-M. Our model suggests that in stock return predictive regressions, sentiment is entwined with the predictors (like inflation) in a complex way, and this relation is better represented by a functional coefficient model.

**Kun He**

*Committee: Barnett, Cai, Iwata*

**Comparison of Supply-Side Inside Money and Demand-Side Total Monetary Aggregates as Economy Indicator at Different Frequencies in the Central Bank's Transmission Mechanism**

Supply-side inside money aggregates and demand-side total monetary aggregates are not equal, since total demand side monetary aggregates include outside money not produced as outputs of private financial intermediaries. As economic indicators, they may performance differently in the short run and long run. Divisia monetary aggregates, on the demand side or supply side, can be expected to perform even better, when taking credit card services into account. In this paper, we empirically compare credit card-augmented Divisia Inside-Money Supply-Side Aggregates and credit card-augmented demand side Divisia Total Money Aggregates. In particular, we compare their correlations with major economic policy targets in the short term and long term. To acquire dynamic performances for times series data at different frequencies, we transform their time series into the frequency domain using spectral analysis methods. Spectral coherence between the Divisia indexes and major final targets of policy at different frequencies can provide evidence of the role of inside money supply side Divisia and total money demand side Divisia in the short run and long run.

Initially, we shall use stationary time series produced from percentage change date in the frequency domain. In subsequent research, we shall investigate nonstationary data with wavelet methodology in the time-frequency domain.

**Abdullah Alabdulkarim**

*Committee: Barnett, Cai,*

**Crude Oil Price Shocks: Distinguishing between Supply and Demand Shocks**

Following Kilian's framework this paper examines how shocks in real oil price can be generated from oil supply shocks, aggregate demand shocks, or oil specific demand shocks. Response of real oil price and macroeconomic variables differ based on the origin of the shocks. Using Kilian corrected version of the index of global real economic activity, this paper tries to reconstruct the model with extended data set.