Northeast Ohio Economics Workshop Program
November 3, 2018

Session 1: 9:00-10:20

1A: Economic History

Title: The Causal Effect of Place: Evidence from Japanese-American Internment
Authors: Daniel Shoag (Case Western Reserve University) and Nicholas Carollo (University of California, Los Angeles)

Abstract: Recent research has stressed the importance of long-run place effects on income and economic mobility, but the literature has struggled to isolate the causal impact of location. This paper provides new evidence on these effects using administrative data on over 100,000 JapaneseAmericans who were interned during World War II. Internees were conditionally randomly assigned to camps in seven different states and held for several years. Restitution payments paid in the early 1990s to the universe of surviving internees allow us to measure their locations and outcomes nearly half a century after the camp assignments. Using this unique natural experiment we find, first, that camp assignment had a lasting effect on individuals' long-term locations. Next, using this variation, we find large place effects on individual economic outcomes like income, education, socioeconomic status, house prices, and housing quality. People assigned to richer locations do better on all measures. Random location assignment affected intergenerational economic outcomes as well, with families assigned to more socially mobile areas (as designated by Chetty et al., 2014) displaying lower cross-generational correlation in outcomes. Finally, we provide evidence that assignment to richer places impacted people's values and political views, a new and intriguing mechanism through which place effects operate. Together, this new causal evidence on location effects has broad implications for urban economics, as well as potential policy implications for policymakers struggling to resettle and integrate large refugee or immigrant populations.

Title: Kenji or Kenneth? Pearl Harbor and Japanese-American Assimilation
Authors: Martin Saavedra (Oberlin College)

Abstract: Do immigrants assimilate in response to an exogenous shock in anti-immigrant sentiment? This paper investigates this question by examining the bombing of Pearl Harbor as a natural experiment. I generate an index for the Americanization of first names from the 1900-1930 censuses and merge this index with records from the universe of Japanese-American internees during WWII. Regression discontinuity design estimates suggest that Japanese Americans born in the days after Pearl Harbor were more likely to have an Americanized first name relative to children born in the days before December 7th, 1941.

Morning Break: 10:20-10:40

Session 2: 10:40-12:00

2A: Housing Markets and Residential Choice

Title: Consumption of Housing During the 2000s Boom: Evidence and Theory
Authors: Lara Loewenstein (Federal Reserve Bank of Cleveland)

Abstract: Housing accounts for about 18 percent of personal consumption expenditures. Over the period 1998-2007, the price of houses increased over 50 percent relative to the price of consumption goods. In this paper I investigate the household consumption responses to this massive change in relative prices using the Panel Study of Income Dynamics matched with detailed geographic information for individual households. The main findings are that (1) households that already owned homes (continuing homeowners) bought larger homes while only marginally increasing their expenditures on non-housing goods and services; (2) in areas with high house price growth, renters became significantly less likely to transition into homeownership, and those that did bought smaller homes; and (3) my empirical results can be explained by optimistic beliefs for future rents that increased both the present price of housing and expectations for future prices. Higher expected capital gains lowered the user cost of owner occupied housing, increasing demand for housing services, while the debt-to-income constraint and higher current house prices limited the transition of renters into homeownership.

Title: Two-worker Households, Decentralized Employment, and Residential Segregation
Authors: Kuzey Yilmaz (Cleveland State University)

Abstract: The last century is marked by (i) an increased female labor force participation and (ii) decentralization of employment. This paper currently extends Hybrid Tiebout models to allow for two-worker households. We develop a general equilibrium model of residential choice in which households face a trade-off among accessibility/space and a public good (education). Education is financed through property taxes, which are determined by majority voting. The quality of education is not only determined by the spending but also the peer group effects. Also, jobs are offered both at the Central Business District and a suburban employment ring. Our model is interesting in the sense that (i) households consider not only the location of the male working member of the household but also the female working member of the household while making residential choice decision and (ii) the presence of decentralized workplaces offers an alternative job location to workers. More importantly, we consider endogenous labor force participation for workers, which allows us to study the impact of increased female labor force participation. Both decentralized workplaces and increased female labor force participation are found to have a substantial impact on the spatial distribution of households across a metropolitan area and hence, segregation by income.

2B: Stock Volatility

Title: Stock Price Fluctuations and Productivity Growth
Authors: Diego Comin (Dartmouth College), Mark Gertler (New York University)**, Phuong Ngo (Cleveland State University),** and Ana Maria Santacreu (Federal Reserve Bank of St. Louis)

Abstract: This paper studies the relationship between stock prices and fluctuations in TFP. We document a strong predictability of lagged stock price growth on future TFP growth at medium horizons. To explore the sources of this co-movement, we develop a one-sector real business model augmented to allow for (i) endogenous technology through R&D and adoption, and (ii) exogenous shocks to the risk premium. Model simulations produce predictability patterns quantitatively similar to the data.

A version of the model with exogenous technology produces no predictability of TFP growth. Decomposing historical TFP, we show that the predictability uncovered in the data is fully driven by the endogenous component of TFP. This finding suggests that fluctuations in risk premia impact TFP growth through their effect on the speed of technology diffusion instead of responding to exogenous fluctuations in future TFP.

Title: Global Commodity Prices and Global Stock Volatility Shocks: Effects across Countries*
Authors: Wensheng Kang (Kent State University), Ronald A. Rattib (University of Missouri), and Joaquin Vespignani (University of Tasmania)

Abstract: This paper investigates the time-varying dynamics of global stock volatility, commodity prices, domestic output and consumer prices. The empirical findings in this paper are: (i) stock volatility and commodity price shocks impact each other and the economy in a gradual and endogenous adjustment process; (ii) the impact of a commodity price shock on global stock volatility is far greater during global financial crises than at other times; (iii) the effects of global stock volatility on the US output are amplified by the endogenous commodity price responses; (iv) in the long run, shocks to commodity prices (stock market volatility) account for 11.9% (6.6%) and 25.1% (11.6%) of the variation in US output and consumer prices; (v) the effects of global stock volatility shocks on the economy are heterogeneous across nations and relatively larger in developed countries; (vi) developing/small economies are more vulnerable during commodity price shocks.

Lunch 12:00-1:00

Session 3: 1:00-2:20

3A: Applied Microeconomics I

Title: The Influence of Misperceptions about Social Norms on Substance Use among Schoolage Adolescents
Authors: Aliaksandr Amialchuk (University of Toledo), Olugbenga Ajilore (University of Toledo), and Kevan Egan (University of Toledo)

Abstract: Individuals often have biased perceptions about their peers' behavior. We focus on one of the most common perceptual biases and use the economic equilibrium analysis to study the role social norms play in the substance use decisions. Using data from the National Longitudinal Survey of Adolescent to Adult Health we estimate the effect of misperception about friends' alcohol consumption, smoking and marijuana use on consumption of these substances by youths in grades 7-12. We find that overestimation of friend's substance use significantly increases adolescent's own use approximately one year later; and the estimated effect is robust across specifications including individual-level fixed effects regression. The effect size is bigger for boys than for girls. We also find the effect to be strong among those who underestimate the norm, which suggests a possible rebound/boomerang effect.

Title: The Cost of Job Loss for Young Men and Women Today
Authors: Justin Barnette (Kent State University), Kennedy Odongo (Kent State University), and Lockwood Reynolds (Kent State University)

Abstract: We examine the effect of involuntary job loss for men and women across the two different cohorts from the NLSY. We find that the cost of job separation has increased over time but that this

increase has been much larger for women compared to men. While women of the 1979 cohort who experienced involuntary job loss did not have any statistical changes to their wages, the women of the 1997 cohort have lasting impacts much like the men of both cohorts. Men of the 1997 who experience separation have impacts to earnings that last longer than the experience of the 1979 cohort. We show that recessions are not driving these differences since they existed before each cohort experiences a recession.

3B: Macroeconomics I

Title: Inflation Volatility with Regime Switching
Authors: Maksim Isakin (Cleveland State University) and Phuong Ngo (Cleveland State University)

Abstract: This paper investigates U.S. inflation dynamics by allowing regime switching in an unobserved components stochastic volatility model. The likelihood is constructed using particle filter with a new resampling procedure that ensures the smoothness of the likelihood function. We estimate the model with three regimes using maximum likelihood and determine prevailing regimes over the 1960:I - 2017:IV period. Our results show that since the start of the Great Recession, U.S. inflation has entered a regime with moderate volatility where most of the volatility comes from transitory shocks. In terms of forecasting, our model produces a better outcome compared to the model without regime switching.

Title: Estimating the Natural Rate of Interest for Small Open Economies
Authors: Ren Zhang (Bowling Green State University), Enrique Martinez-Garcia (Dallas Federal Reserve Bank), and Valerie Grossman (Dallas Federal Reserve Bank

Abstract: This paper makes the first attempt in the literature to estimate the natural interest rate for six countries (Australia, Canada, South Korea, Sweden, Switzerland, and the U.K.) with a small open economy dynamic stochastic general equilibrium model. Our empirical analysis leads to the following four novel findings. First, using a Bayesian method, we show that the open-economy framework is more appropriate than its closed-economy counterpart in capturing the data dynamics in all of the six countries. Second, the natural interest rates estimated in all six countries have been trending down and commove with each other in the past thirty-five years. Third, the foreign output shock serves as a major contributor to the estimated dynamics in the natural interest rates. Last, we also demonstrate that, in all six countries, the interest rates track the Wicksellian efficient rates of return as the primary indicator of real activity, fits the data better than otherwise identical Taylor rules.

Break 2:20-2:40

Session 4: 2:40-4:00

4A: Applied Microeconomics II

Title: Greener on the Other Side? Property Tax Collection and Horizontal Inequality
Authors: Michael Carlos Best (Columbia University), Francois Gerard (Columbia University), **Evan Plous Kresch (Oberlin College**), Joana Naritomi (London School of Economics), and Laura de Castro Zoratto (World Bank)

Abstract: Property taxes are a key source of municipal government revenue worldwide. While one of the key characteristics of property taxes is the little room for self-reporting (and opportunity for tax evasion/avoidance), in developing countries this can create additional difficulties in tax collection. Tax

base assessment is costly, and in countries with lower state capacity, this often leads to property taxes taking the form of a presumptive tax, which may lead to horizontal inequities as taxpayers are arguably similar but face different rates. Moreover, tax collection from known liabilities is far from perfect, and while taxpayers that fail to pay taxes can be prosecuted, in developing countries with little legal capacity this may lead to a lack of enforcement and recurrent amnesties.

In this environment, tax payments could be - to some extent - thought of as voluntary contributions. The literature on tax morale is potentially important in explaining the drivers behind the decisions of households to pay (or shirk) their property taxes (Luttmer and Singhal, 2014). While there is evidence on overall compliance behavior with respect to tax rates (see (Slemrod, 2017)), and on responses of payments of already declared liabilities to nudges (Hallsworth et al., 2017), there has been little study on the responses of payments of already assessed liabilities to tax rates. In this setting, horizontal inequality - whereby households with similar observed property characteristics have significantly different assessed tax liabilities - may play an important role in the low rates of property tax compliance observed across developing countries.

We examine the role that horizontal inequality contributes to tax payments of known tax liabilities using property tax records in Manaus, Brazil. We exploit the structure of the municipal property tax system, wherein the city is divided into 65 sectors, each with its own per-square-meter tax rate. Discontinuous jumps in the tax rate at the boundaries of these tax sectors allow us to measure the elasticity of tax delinquency with respect to the tax rate in a spatial Regression Discontinuity framework. We use an administrative dataset from the Finance Secretariat (SEFAZ) in Manaus, with information on property tax liabilities, payments, fines for delinquency, legal follow-ups, household characteristics, a registry of property transfers, and GIS maps of housing lots for the universe of households in the city from 1998-2018.

Results from the regression discontinuity framework show that - while assessed home values vary smoothly across the tax sector boundaries - the change in tax rates across sectors produces a discontinuous jump in tax liability for households on the "high tax" side of the boundary. This jump is associated with a significant increase in tax delinquency for households on the immediate boundary of the higher tax sector. We interpret this as a behavioral response to perceived "unfairness" of tax assessment. Additional evidence suggests that the jump in delinquency payment is larger when the tax jump across sectors is larger. We also study a role-out of a new tax rate from 2011-2016 and find that households respond to differences in their relative tax rate compared to neighboring sectors, and not the absolute difference in rates. This paper provides evidence that horizontal inequality may have a significant distortionary effect on presumptive tax systems, especially in developing country contexts where tax enforcement may be low.

Title: Valuation of Expiration Labeling Uncertainty on Food Products: Is There a Difference between "Sell-by" and "Expires on" Labeling from the Consumers` Perspective?

Authors: Onur Sapci (University of Toledo) and Ayse Sapci (Utah State University)

Abstract:

In this study, we design and conduct an experimental auction to investigate the effects of expiration labeling uncertainty on consumers' willingness to pay for food items. Specifically, the experimental auction examines whether there is a valuation difference between "sell-by" and "expires on" food labeling. While "expires on" gives a definite information on the expiration date of a product, "sell-by" creates an uncertainty for consumers. In addition to food safety issues, uncertainty is likely to affect buying decisions of consumers which in turn alters production and pricing decisions of firms. Even though there is some tendency to perceive sell-by date as an expiration date, the experimental auction results suggest that consumers are willing to pay a premium for more clear information. In particular, "expires on" information about food expiry date has a 25% willingness to pay premium over "sell-by" type labeling, showing that consumers try to avoid uncertainty in their product choice and consumption.

4B: Macroeconomics II

Title: Sovereign Default Risk and Product Market Linkages
Authors: Nupur Gupta (The Ohio State University)

Abstract: The eruption of the government debt crisis in the Eurozone since 2009 has increased the borrowing costs for many members of the currency union. Unsustainable debt accumulation by certain nations brought those nations near default, thus increasing the yields on their sovereign bonds. Since the Eurozone sovereign debt crisis, there have been many suggestions on developing a common euro area wide safe asset with joint-and-several liability to move the currency union in the direction of a political union. I wish to construct one such eurobond and analyze its effects on welfare in multiple countries if they have another such crisis. As a step in that direction, in this paper, I develop a model to analyze the movement in the credit spreads of two small open economies. They trade intermediate goods and produce a final non-tradable good. The countries borrow from a common risk-neutral lender
and can default. Having the option to default acts as an insurance in imperfect financial markets. This model endogenously generates a countercyclical interest rate schedule and prevents excessive borrowing in bad states. I show that symmetric countries have positively correlated spreads. Moreover, trade allows each country to pool their risk internationally as well as to lower their spreads compared to the case of autarky.

Title: Systemic Risk or Systematic Risk? The Nonlinear Impact of Risk Shocks across Financial Regimes
Authors: Stefan Avdjiev (Bank for International Settlements) and **Zheng Zeng (Bowling Green State University)**

Abstract: Systemic risk, according to Benoit et al. (2015), a hard-to-define-but-you-know-it-when-yousee-it concept, has caught much attention recently by researchers in the areas of banking, macroeconomics, finance, as well as econometrics, and has been used, in particular, to identify the vulnerabilities of the financial system. Its interactions with systematic risk and credit market conditions are naturally worth exploring.

In this paper, we develop a Threshold Vector Autoregression Model (TVAR) to examine the nonlinear nature of the interactions among systemic risk, systematic risk, credit market conditions, and monetary policy. We employ a monthly Credit-to-Output Gap (the concept was initially developed by Drehmann et al. (2011) at the Bank for International Settlements) as our threshold variable, and therefore, our model identifies three financial cycles: a tight credit regime, a normal credit regime, and a loose credit regime (each relative to output). Using the Systemic Risk Measure (SRISK) developed by Acharya et al. (2012) and Brownlees and Engle (2015), and VIX as a measure of systematic risk, these two risk variables, together with the Shadow rate as a measure of monetary policy, contribute to estimating the two threshold values. Three Wald test statistics over all possible threshold values are computed (the maximum Wald, average Wald, and sum of exponential Wald) using bootstrap simulation methods (as in Hansen (1996)), and all statistics point to strong evidence of the existence of both thresholds.

Our model reveals significant asymmetry across regimes. We found that credit shocks have a larger impact in a higher credit regime than a lower one on most variables. These unexpected increases in the credit-to-output gap reduce SRISK in both regimes, while interestingly yet intuitively, cause VIX to drop when credit is tighter (relative to output) and to rise when credit is already loose. Our model also implies that monetary policy appears to be more effective at controlling loose credit in a high credit regime than a slower one. Unexpected tightening of monetary policy also has a much larger impact on increasing VIX in a high credit regime. On the other hand, contracting money appears to slow down bank behaviors and reduce SRISK, especially in the loose credit regime.