N.B. Correspondence author is listed first. First discussant is assigned to first paper, second to second paper, etc. An email list for each session is on the final page.

#### January 4, 2016 – 8:00AM-10:00AM

#### Hilton Union Square, Golden Gate 8

#### Session I: Health Behavior and Outcomes (H8, I1)

Presiding: Janet M. Currie, Princeton University

*The Impact of Scheduling Birth Early on Infant Health* Cristina Borra, University of Seville Libertad Gonzalez, Universitat Pompeu Fabra Almudena Sevilla, Queen Mary, University of London

An increasing number of births are scheduled early for non-medical reasons in many countries in the belief that 37 weeks in the womb are enough. We provide new, credible causal evidence on the infant health consequences of scheduling birth early for non-medical reasons. We take advantage of quasi-experimental variation driven by an exogenous policy change in Spain. In May 2010, it was announced that an existing, generous universal child benefit would stop being paid for babies born in January 2011, thus providing pregnant women with a January due date with an economic incentive to schedule births earlier. After estimating that about 2,000 births, about 6% of all January births, were shifted back to December in order to qualify for the benefit, we evaluate the health effects of early delivery for the affected babies using high-quality administrative data from birth certificates and hospital records for children born in Spain from 2000 to 2012. Our identification strategy relies on comparing the health outcomes of all babies born close to the New Year of 2010-11, to those born on the same dates in the surrounding years, using October and November as "control months". We find that affected babies (those delivered early due to the benefit cancellation) were born more than 250 grams (8 percent) smaller on average as a result, and suffered a 20 percentage-point increase in hospitalizations due to respiratory disease during the second and third months of life. We are the first to provide credible causal evidence on the effect of scheduling birth for non-medical reasons on health outcomes beyond birth. Our results also shed some light onto the mechanisms behind the strong associations between weight at birth and a range of short and long-term outcomes documented in literature, linking them to a lower maturation of these babies at birth. JEL: H31, I12, J13.

#### Air Pollution and Pro-Cyclical Mortality: Causal Evidence from Thermal Inversions

Paulina Oliva, University of California, Santa Barbara Daniel Hicks, The University of Oklahoma Patrick Marsh, NOAA/NWS Storm Prediction Center

Abstract pending.

#### Strategic Self-Ignorance

Linda Thunström, University of Wyoming Mariah Ehmke, University of Wyoming Jonas Nordstrom, Lund University Jason Shogren, University of Wyoming Klaas van't Veld, University of Wyoming

We examine *strategic self-ignorance*—the use of ignorance as an excuse to over-indulge in pleasurable activities that may be harmful to one's future self. Our model shows that guilt aversion provides a behavioral rationale for present-biased agents to avoid information about negative future impacts of such activities. We then confront our model with data from an experiment using prepared, restaurant-style meals—a good that is transparent in immediate pleasure (taste) but non-transparent in future harm (calories). Our results support the notion that strategic self-ignorance matters: nearly three of five subjects (58 percent) chose to ignore free information on calorie content, leading at-risk subjects to consume significantly more calories. We also find evidence consistent with our model on the determinants of strategic self-ignorance. JEL: D03, D81, D83.

#### Health Effects of Transportation Policy: Quito's 'Pico y Placa' Program

#### Yiseon Yoo, The George Washington University

A number of health studies discuss and find a significant association between air pollution and negative health outcomes. The driving restrictions program in Quito has decreased air pollution levels. The effect has diminished, but it continues to induce reductions in pollution levels well after its introduction in May 2010. Using hospital discharge data, this study examines the health effects of driving restrictions program in Quito. The effects on the hospitalization rates of the populations most sensitive to air pollution are examined. Count data analysis that accounts for overdispersion in

hospitalization reveals that some health benefits have accrued after the imposition of the driving restrictions: there has been a reduction in the elderly's cardiovascular hospitalization rate. The estimated effect is equivalent to a decrease in the total hospital admissions of the elderly by 1.3%. JEL: 118, R48.

**Discussants:** Emily Oster, Brown University Garth Heutel, Georgia State University Michael Lovenheim, Cornell University Janet Currie, Princeton University

#### January 4, 2016 – 2:30PM-4:30PM

#### Hilton Union Square, Continental, Parlor 1

## Session II: Education (H8, I2)

Presiding: Terra G. McKinnish, University of Colorado, Boulder

# The Impact of Authorization on the Schooling and Labor Market Outcomes of Undocumented Immigrants: Evidence from the Deferred Action for Childhood Arrivals Program

Francisca Antman, University of Colorado Boulder Catalina Amuedo-Dorantes, San Diego State University

This paper explores the labor market and schooling effects of the Deferred Action for Childhood Arrivals (DACA) initiative, which provides work authorization to eligible immigrants along with a temporary reprieve from deportation. The analysis relies on a difference-in-differences approach that exploits the discontinuity in program rules to compare eligible individuals to ineligible, likely undocumented immigrants before and after the program went into effect. To address potential endogeneity concerns, we focus on youths that likely met DACA's schooling requirement when the program was announced. We find that DACA reduced the probability of school enrollment of eligible higher-educated individuals, as well as some evidence that it increased the employment likelihood of men, in particular. Together, these findings suggest that a lack of authorization may lead individuals to enroll in school when working is not a viable option. Thus, once employment restrictions are relaxed and the opportunity costs of higher-education rise, eligible individuals may reduce investments in schooling. JEL: J15, J20, J61.

#### Cities Drifting Apart: Heterogeneous Outcomes of Decentralizing Public Education

Zelda Brutti, European University Institute and London School of Economics

I focus on the decentralized provision of public education in a middle income country, and provide original empirical evidence on heterogeneous impacts of autonomy, depending on the levels of development characterizing local authorities. Colombian municipalities were assigned to administer their public education service autonomously solely on the basis of whether they exceeded the 100 thousand inhabitants threshold. Exploiting this discontinuity, I look at the heterogeneous impact that autonomy has had on student test scores across municipalities using a regression discontinuity design and fixed-effects regression on a discontinuity sample. I find a test score gap arising between autonomous municipalities in the top quartile and those in the bottom quartile of the development range, in a trend that reinforces over time. From analysis of detailed municipal balance sheet data, I show that top-quartile municipalities are wealthier and invest in education more than the ad hoc transfers they receive, supplementing these with own financial resources. Significant differences that help explaining outcome patterns are also found in indicators of municipal administration quality. JEL: H41, H75, I25.

#### Information Matters: Salient Student Loan Information Affects College Students' Behavior

Carly Urban, Montana State University Maximilian Schmeiser, Federal Reserve Board Christiana Stoddard, Montana State University

The rapid increase in the number of college students with student loan debt and the amount of debt borrowed to finance post-secondary education have attracted increasing attention as potential threats to the financial well-being of young adults and to the broader economy. However, little research has focused on pre-graduation interventions that may change the subsequent student loan choices and academic performance of college students. We exploit a natural experiment that sent "Know Your Debt" letters to raise awareness of students' education debt levels and provided incentivized offers of one-on-one financial counseling. The letters warned students that their debt levels were high relative to their standing in class and the projected salaries for their majors. This intervention was targeted at Montana State University students reaching a specific debt threshold, where a separate threshold existed for freshmen, sophomores, juniors, and seniors; the University of Montana provided no comparable intervention. We use a difference-in-differences (DDD) identification strategy to compare students above and below the thresholds, across campuses, and before and after the intervention to determine how the letters affected students' academic and loan choices in the subsequent semesters. Employing a never-before-used rich administrative dataset that contains detailed individual-level information on all Montana University System students, their academic records, and detailed financial aid packages, we find that students receiving the letters take out an average of \$1,450 less in the subsequent semester—almost one-third less than students in the comparison group. If the slower pace of debt accumulation is due to these students working part-time jobs, it does not adversely affect their academic performance. In fact,

those who receive the intervention take more credits and have higher GPAs in the subsequent semester. For freshmen, the intervention increases the probability of declaring a STEM major and improves one-year college retention probabilities by 5 percent. JEL: 122, 123, J24

#### Federal Grant Coverage of Female Graduate Students and Professors in STEM Programs: Evidence from STARMETRICS Data linked to the 2010 Census

Catherine Buffington, U.S. Census Bureau Benjamin Harris, U.S. Census Bureau Christina Jones, American Institutes for Research Bruce Weinberg, Ohio State University

Women and members of many racial and ethnic minorities are underrepresented in many science and engineering fields, with the extent of underrepresentation increasing in career stage. We provide an in depth analysis of gender differences at a critical juncture in the STEM pathway – graduate research training and early career outcomes. We build on a unique data set – UMETRICS administrative data that allow us to characterize the teams on which graduate students train. We match these data to the 2010 Census and the LEHD, providing (1) information on gender and other demographics and (2) early career outcomes, including employment and earnings. The resulting linked data provide a powerful window into understudied, early, formative stages of professional research careers at a time when the STEM workforce is becoming increasingly important economically. JEL: J16, I23, O31.

#### **Discussants:**

Kelly Bedard, University of Southern California at Santa Barbara Caroline Hoxby, Stanford University Sarah Turner, University of Virginia Paula Stephen, Georgia State University

#### January 3, 2016 - 2:30PM-4:30PM

Hilton Union Square, Golden Gate 8

### Session III: Public Finance (H3)

Presiding: Ragan Petrie, George Mason University

#### The Role of Medical Expenditure Risk in Portfolio Allocation Decisions

Padmaja Ayyagari, University of Iowa Daifeng He, College of William and Mary

This study evaluates the effect of medical expenditure risk on the portfolio allocation decisions of elderly households. Given the increasing prevalence of chronic illnesses with advanced age and rising health care costs, older adults face considerable uncertainty regarding their future medical expenditures. Although health insurance coverage can mitigate medical spending risk, this risk is typically not fully insurable due to deductibles, co-payments and other cost-sharing mechanisms. Thus, medical expenditures can be viewed as a type of un-diversifiable background risk. Economic theory suggests that background risk influences the amount of financial risk that a household is willing to bear, i.e. it influences portfolio choice. A key challenge in estimating the causal impact of medical spending risk on portfolio choice, however, is that unobserved factors simultaneously affect both medical spending and investment decisions. In this study, we exploit the exogenous reduction in prescription drug spending risk due to the 2006 introduction of the Medicare Part D program to identify causal effects. Using data from the 1996-2010 waves of the Health and Retirement Study (HRS), we estimate the impact of Medicare Part D on the probability of owning risky assets (e.g., stocks, mutual funds and investment trusts), and on the share of financial wealth invested in risky assets. We find a significant increase in both ownership of risky assets and share of financial wealth in risky assets to the reduction in medical expenditure risk due to Medicare Part D. We also find evidence of heterogeneity – households in the middle of the wealth distribution are more responsive to the drop in spending risk, as are persons with better cognitive ability, longer planning horizons, and stronger bequest motives. We discuss the implications of our results for health insurance policy and for the financial security and welfare of elderly households. JEL: G11, I13.

#### Saving Lives or Saving Money? Understanding the Dual Nature of Physician Preferences

Alice Chen, University of Southern California Darius Lakdawalla, University of Southern California

A longstanding literature has highlighted the tension between the altruism of physicians and their desire for profit. This paper develops new implications for how these forces drive pricing and utilization outcomes in healthcare markets. Altruism dictates that providers reduce utilization in response to higher prices, but profit-maximization does the opposite. Rational physicians will behave more altruistically towards poorer, vulnerable patients, and when the financial costs of altruism are lower. These insights help explain the observed heterogeneity in pricing dynamics across different healthcare markets. We empirically test the implications of our model by utilizing two exogenous shocks in Medicare price setting policies. Our results demonstrate that uniform policy changes in reimbursement or patient cost-sharing may not generate the intended responses on quantity. JEL: 111, 110.

#### The Effect of Public Pensions on Household Saving

Marta Lachowska, W.E. Upjohn Institute for Employment Research Michal Myck, Centre for Economic Analysis

To answer whether public pensions displace private household saving, we study a pension reform in Poland that created a setting similar to a quasiexperiment. Poland's 1999 pension reform had a different impact on individuals depending on their year of birth. Individuals who were older than 50 years at the time of the reform were not directly affected by the reform. However, individuals who were 50 years or younger at the time of the reform will receive pension benefits computed according to a much less generous post-reform pension formula. We use this arbitrarily-set cutoff at age 50 to identify whether the resulting decrease in expected pension wealth led to an increase in household saving, or, equivalently, to answer whether public pensions crowd out household saving. By comparing the saving rate before and after the reform and across similarly aged people some of whom were affected by the reform and some of whom were not—we can identify the effect of the reform on this outcome. To do so, we use data from the Polish Household Budget Surveys for the years 1997–2003 to first estimate difference-in-differences regressions comparing household saving rate before and after the 1999 reform for the cohorts directly affected and unaffected by the reform. Second, we estimate the degree of crowd-out, i.e., the change in the household saving rate in response to the change in expected public pensions displace private saving by approximately one for one. This key result means that, for older households, public pensions and private saving are close to perfect substitutes. JEL: H55, I38, E21.

# The Spillover Effects of Two-Rate Property Taxation in Pennsylvania: a Zero-Sum Game or a Win-Win Game?

Zhou Yang, Robert Morris University

This paper is the first to empirically investigate the spillover effects of two-rate property taxation in Pennsylvania. Using rich panel data for county subdivisions in Pennsylvania over the period 1980-2010, this paper extends the existing research by offering the first evidence on the external impacts of two-rate property taxation as well as the spatial dynamics of these spillover effects. The empirical model separately identifies the externalities associated with two-rate property taxation as well as the external impacts of traditional property taxation. The study shows that two-rate property taxation slows down employment growth in close neighbors but speeds up employment growth in neighbors within a longer distance. The findings suggest that two-rate property taxation generates differential spillover effects across space. JEL: H71, H23, R12.

#### **Discussants:**

Nicole Maestas, Harvard University Joshua Gottlieb, University of British Columbia John Friedman, Brown University Daniel Millimet, Southern Methodist University