

CSWEP Sessions at the Eastern Economic Association Meetings

Session 1: The Economics of Obesity,

Friday February 26th, 11am

Chair: Kerry Anne McGeary, Drexel University

Papers:

"The Impact of Knowledge and Diet on Body Mass Production" Kerry Anne McGeary, Drexel University (abstract unavailable)

"Obesity, Divorce, and Labor Market Outcomes." Hannah Spirrisson, Department of Economics, Rhodes College

There is an extensive economic literature on wage gaps across gender, race, and even beauty (Altonji 1999, Hamermesh 1993). While it is well known that obesity rates are increasing in the United States, relatively little research aims to explain the obesity wage gap. As of 1998, obese workers were paid approximately \$1.20 an hour less than non-obese workers (Baum, Ford 2004). Recognizing the variety of possible explanations for an obesity wage gap, a new and growing literature has developed. While there is consistent evidence of wage gaps between normal weight, overweight, and obese workers, explanations for the wage differences vary and extend well beyond differences in worker productivity. Self-esteem (Mocan, Tekin 2009), genetics (Norton, Han 2007), and discrimination (Baum, Ford 2004) are all potential factors contributing to a wage gap. This research will contribute to this literature by introducing divorce status as an explanatory variable. If stress is accompanied by emotional eating or biological processes that affect weight gain, then a change in marital status may affect an individual's body mass index (BMI). At the same time, divorce may lead to job change or relocation with some consequence for wages. Therefore, the author estimates a joint model of obesity and wages where divorce status is a potential contributing factor to both outcomes.

"How Do Business Cycles Affect Our Eating Habits? Evidence from the Behavioral Risk Factor Surveillance System" Dhaval Dave (Bentley University), Inas Rashad Kelly (Queens College/CUNY)

How the nation's health behaviors differ with changing economic times has recently been of interest to economists, with much evidence pointing to healthier behavior being countercyclical, or increasing during recessions. In spite of the stress that could be involved with unemployment and changing family structure, this result appears to hold for a variety of health outcomes, including physical health surrounding smoking and obesity, and mental health as measured by depression. This study utilizes data from two individual-level data sets representative of the U.S. population: the Behavioral Risk Factor Surveillance System (1990-2007) and the Continuing Survey of Food Intakes by

Individuals to explore the relationship between business cycles and nutrition. This study takes potential confounding factors into account in order to explore the causal effect of changes in the business cycle on the consumption of various foods. Our empirical methodology is based on simultaneous equations models (accounting for correlation across errors) and stratified samples to understand the link between business cycles and nutrient intake. Preliminary results indicate that the consumption of healthier foods increases when the unemployment rate decreases, or that a healthy diet is procyclical

Discussants: Suzanne Clain, Villanova University, and Shin-Yi Chou, Lehigh University

Session 2 Health Economics

Chair: Jennifer Kohn, Drew University

Papers:

"Disease and Government Size: The Impact of Life Expectancy on Per Capita Government Spending" Resul Cetur (Georgia State University)

By utilizing the “predicted mortality” instruments created by Acemoglu and Johnson (2007) in dealing with the potential endogenous relationship between government share of GDP per capita, and per capita government spending, this paper documents that an increase in life expectancy has a positive and statistically significant effect on government share of GDP per capita, and per capita government spending in a general equilibrium framework. Instrumental variables results are robust to the utilization of a system GMM dynamic panel estimator econometrics methodology. These results show that increased longevity in population has a binding impact on policy preferences of a society (i.e., greater life expectancy leads to a greater demand for the goods and services provided by government)

"A New Look at Managed Care on Health Care Utilization"
James Marton (Georgia State University)

"Does managed care produce lower health care utilization and costs through better aligned financial incentives and alternative delivery methods (the “pure HMO” effect) or by attracting more healthy enrollees (plan endogeneity)? The purpose of this paper is to shed new light on this fundamental question using a quasi-experimental approach that exploits the timing and county specific implementation of Medicaid managed care plans in two distinct sub-sets of Kentucky counties in the late 1990s. We find large differences in the relative success of each region in reducing utilization that are likely driven by important differences in plan design."

“Effects of Prenatal Care on Child Health at Age 5”. Kelly Noonan, Rider University, Hope Corman, Rider University, Ofira Schwartz-Soicher, Columbia University and Nancy E. Reichman, Robert Wood Johnson Medical School.

Although prenatal care is one of the most frequently used health services in the United States, past research has not found compelling evidence that it has favorable effects on birth outcomes. However, according to the *Public Health Service's Expert Panel on the Content of Prenatal Care*, a broad goal of contemporary prenatal care has been to promote the health of the mother, child, and family through the pregnancy, delivery, and the child's development. It is therefore possible that prenatal care confers health benefits to the child that do not become apparent until after the perinatal period. We use data from the Fragile Families and Child Wellbeing (FFCW) birth cohort study of urban, mostly nonmarital births to estimate the effects of prenatal care on four markers of child health at age 5—maternal reported health status, asthma diagnosis, overweight, and height. Information on prenatal care was obtained from the mother's medical record from the birth hospitalization, and the child's height and weight were measured as part of an in-home child assessment at age 5. The remaining variables come from surveys that were administered at the time of the birth and when the child was age 5. We estimate both single-equation and two stage models, the latter of which address the potential endogeneity of prenatal care, and find that prenatal care, defined a number of different ways, does not have any effect on the child health markers examined. These findings point to a missed opportunity to the extent that routine health care encounters during the prenatal period could be more effectively used to enhance children's health trajectories.

“ Can't We Just Live Together? New Evidence on the Effect of Relationship Status on Health”, Jennifer Kohn, Drew University and Susan Averett, Lafayette College

An extensive literature suggests that marriage confers health benefits to men and women. However, several econometric issues raise doubts about this prevalent conclusion. First, measures of morbidity vary across studies making comparisons difficult and the often used categorical measure of self-assessed health raises difficult interpretation and econometric issues. Second, extant research relies almost exclusively on fixed-effects models to control for selection into marriage without addressing the strong persistence in health. In addition, existing research has not confirmed whether these benefits accrue to couples who cohabit. We use a multiple correspondence analysis to identify instruments for a continuous health index that reflects the multiple facets of morbidity and alleviates the econometric issues associated with a discrete dependent variable. We use the Blundell and Bond dynamic panel data estimator to control for selection into marital status by instrumenting marital status with its lagged levels and lagged differences. Contrary to extant literature, our analysis using a balanced panel of nearly 2,430 individuals over 17 waves of the British Household Panel Survey finds that the effect of cohabitation on health is not statistically different from the effect of marriage on health after controlling for both selection and health dynamics.

“What is Health?” Jennifer Kohn, Drew University

While there are volumes written on health there is no consensus on how to measure it. I offer a brief synthesis of the pros and cons of the health proxies currently used in the economic literature. I then illustrate an index that identifies instruments with a multiple correspondence analysis (MCA). This index reduces the multiple health indicators commonly available in large social surveys to a continuous variable using minimal modeling assumptions. The MCA statistical procedure identifies index weights to maximize the correlation between each variable and the over all measure of correlation in the data which better reflects the unobservable health state than any individual proxy. I compute this index for 17 waves of the British Household Panel Survey (BHPS), compare it to self-assessed health and discuss modeling issues associated with cross-sectional and panel analysis.

Discussants:

Sarah M. Estelle, Rhodes College and Cheryl Carleton, Villanova University

Session 3

Title: Health and Labor Economics

Chair: Laura Argys, University of Colorado at Denver

Papers:

“Test and Analysis of Subjective Expectation Model, with an Application to Retirement Savings. “Yang Wang, Lafayette College

We develop a GMM-type approach to analyze subjective expectations in the presence of private information and test the validity of subjective expectation model. We show that, using subjective expectations data, we can jointly estimate the key moments of the underlying objective expectation, expectation bias, and realization shock, and use over-identifying restrictions due to higher-order moments to test model specifications. Using survey data on retirement savings, we find that individuals significantly over-predict their retirement savings, and there are sizable right tails in the distributions of the underlying states. Model specification which allows for conditioning variables is strongly supported by the data.

"Are low wages risk factors for hypertension? An instrumental variables model using national longitudinal data" Paul Leigh, School of public health sciences, University of California, Davis, Juan Du, School of Business, The College of New Jersey

Considerable debate surrounds conjectures that poverty causes disease. Correlations between measures of poverty and disease in observational data might be due to disease causing poverty or unobserved “third variables” resulting in both. In addition, “poverty” and “disease” are broad concepts. We applied the instrumental variables approach in an attempt to minimize bias from possible reverse causality or “third variables.” We also

narrowed concepts by considering wages and hypertension. We analyzed longitudinal data from four waves of the Panel Study of Income Dynamics. Samples were restricted to persons with jobs or self-employed and ages 21 to 65. Hypertension was self-reported based on physician diagnosis. Logistic regressions and random effects model were used that controlled for socio-demographic variables and risk factors. Negative and statistically significant correlations between wages and hypertension were found both before and after applying the IV method. The estimated effect and statistical significance of wages were larger after applying IV.

“Is it Necessary to Walk the Talk? The Effects of Parental Experiences and Communication on Adolescent Sexual Behavior.” Susan L. Averett, Lafayette College and Sarah M. Estelle, Rhodes College

Abstract Recent social marketing campaigns exhort parents to talk to their children about drug and alcohol use and/or sexual abstinence. The efficacy of such campaigns is difficult to ascertain, however, if parents are more likely to broach these topics with adolescents with otherwise greater propensities for risky behavior. While extant research recognizes the importance of family environment and parenting activities, little has been done to separately control for the various aspects of parenting that might confound the influence of the marketing campaigns. This research aims to separately identify the effects of parenting style, a parent’s own risky behavior, and the parent’s communication (“parental talk”) about risky behavior on her adolescent’s sexual behavior. We find that female adolescents with more lenient parents and mothers who gave birth at younger ages are more likely to have sex and have more sexual partners. After controlling for potential endogeneity in parental talk, however, there is no evidence of significant effects of this communication on adolescent sexual initiation, number of partners, or safe sex practices.

"National School Lunch Program Participation and Child Body Weight"
Donka M. Mirtcheva, The College of New Jersey, and Lisa M. Powell, University of Illinois at Chicago

Using recent data from the 1997 and 2003 waves of the Child Development Supplement (CDS) to the Panel Study of Income Dynamics (PSID) linked to external data on school and neighborhood characteristics, this paper examines by gender and grade level the relationship between school lunch and body weight among public school children grades 1-12. In ordinary least squares estimation, eating a school lunch statistically significantly increases the body mass index (BMI) percentile ranking of public school students by 3.2 BMI percentiles, which is attributed to girls (5.9 BMI percentiles heavier) and not boys. Instrumental variables (IV) approach, which accounts for potential endogeneity of eating a school lunch with respect to body weight, shows no effect of school lunch participation on child body weight. Overall, findings from a naïve model framework indicate that school lunches increase body weight. Accounting for endogeneity wiped out the effects of NSLP participation, suggesting that the dietary improvements of the USDA school lunches may have achieved the goal of providing healthy meals.

Discussants: Dhaval Dave, Bentley University, and Laura M. Argys, University of Colorado-Denver