

Paper 1

James Heckman, **Jin Zhou** (City University of Hong Kong)

The Microdynamics of Early Childhood Learning

Abstract:

This paper investigates the dynamics of early life skill formation at a granular level using unique data from a widely-emulated early childhood home-visiting program developed in Jamaica and adapted to rural China. The design of the study avoids problems of endogeneity of inputs and lack of meaningful yardsticks of skills that plague previous econometric studies of child development. Skills that are nominally classified as the same, in fact, do not share a common scale across levels. They are produced by skill-specific, lifecycle-stage-specific technologies. We formulate and estimate a new dynamic stochastic skill production model for multiple skills consistent with the evidence. We quantify the dynamics of early life learning. The model explains the “fadeout” of measures of learning. We examine the role of ability in learning. We find important differences in learning patterns between boys and girls.

Paper 2

Qinyou Hu (Aalto University & Rice University)

Breaking Down Bullying: Empathy, Social Networks, and Adolescents

Abstract:

This paper examines the formation of a specific non-cognitive skill – empathy – and its role in determining bullying behavior with a focus on social networks. The analysis centers on a parent-directed empathy-fostering intervention, which successfully increased empathy levels and reduced bullying among students. To disentangle the mechanisms underlying these findings, I develop and estimate a structural model of empathy development, network formation, and bullying decisions. The analysis reveals that 32% of the observed reduction in bullying is attributed to empathy-induced alterations in social networks. Policy counterfactuals show that social network information is valuable. Notably, targeting students based on popularity can lead to up to a 7.5% further reduction in bullying compared to targeting students randomly. Moreover, targeting bullies' friends is more effective than targeting bullies directly. This insight holds promise for refining the efficacy of anti-bullying initiatives, which often focus more on bullies, and highlights the potential of reshaping social networks to mitigate violent behavior among adolescents.

Paper 3

Hanming Fang, **Lin Lin** (East China Normal University), Wei Shi

Affordable Care Act, Physicians' Location Choices, and Care Access Disparity

Abstract:

The implementation of the Affordable Care Act (ACA) has led to significant increases in health insurance enrollment among low- and moderate-income populations, particularly in disadvantaged areas. Exploiting geographic variations in ACA-induced enrollment changes, we use a dyadic regression model to estimate whether, and to what extent, health insurance enrollment gains—especially in terms of private insurance and Medicaid—affect physicians' location choices and, consequently, reshape spatial disparities in physician access. We find that an increase in private insurance enrollment in a location attracts physicians through relocation, whereas an increase in Medicaid enrollment tends to deter them, particularly among those with greater experience or from top-tier medical programs. The discouraging effect of Medicaid is largely due to its low reimbursement rates, while the appeal of private insurance is driven by physicians' desire to serve a broader patient market. In sum, our simulations, based on reduced-form estimates and a discrete choice model, suggest that ACA-driven insurance expansions may have inadvertently exacerbated disparities in physician access in disadvantaged areas. Regarding other medical providers, we find that the ACA health insurance expansion similarly influences the geographic distribution of physician assistants and nurses, but has no significant effect on medical institutions such as physician organizations, hospitals, and health centers.

Paper 4

Toshiaki Iizuka (The University of Tokyo), Shinya Sugawara, Masaki Takahashi

Vertical Integration and Agency with Cognitive Limitations: Evidence from Long-Term Care

Abstract:

We investigate vertical integration and agency in at-home long-term care (LTC) services in Japan, where a care manager (CM) works as an agent to coordinate care for frail older people who often have cognitive constraints. Importantly, CMs and downstream services can legally be held in the same ownership in Japan. This raises the concern that financial incentives from vertical integration may distort a CM's decision as an agent for older people. We find that CMs play key roles in determining LTC services for frail older people. Vertically integrated CMs induce demand for co-owned providers by creating a care plan that includes service types provided by co-owned services, especially for recipients with higher cognitive limitations. Moreover, integrated CMs substitute not-co-owned services with co-owned services. However, we find no evidence that vertical integration improves efficiency by slowing the progression of care needs or deterioration of health outcomes. Thus, our results indicate that vertical integration of CMs and service providers leads to an agency problem by distorting care plans in favor of integrated services without clear benefits to recipients, and the concern for agency conflicts is greater when recipients have more cognitive limitations.

Paper 5

Zhi Cao (Chinese University of Hong Kong), Yan Chen, Wei Yan, Junjian Yi, Hang Zou

Hospital Discharge: Model, Estimates, and Policy Analyses

Abstract:

One of the most important medical decisions is when to discharge a patient: it involves physicians and patients, entails information asymmetry, and occurs in dynamic contexts. Moreover, although the physician cares about the patient's interests, her preference regarding the trade-off between the patient's out-of-pocket expenses and health benefits may differ from the patient's. We develop and structurally estimate a model of discharge decisions that incorporates these features. The model allows us to distinguish between the impacts of a patient's financial incentive and a physician's altruistic and financial incentives on treatment and welfare outcomes. Also, it enables us to isolate the effect of preference inconsistency from the effects of the three incentives. We find that all three incentives raise healthcare expense, while preference inconsistency reduces it. Drawing from our structural estimates, we investigate policies aimed at managing overall expenses while enhancing patient and social welfare, without negatively impacting physician revenue.

Paper 6

Sebastian Bauhoff, **Eeshani Kandpal** (Center for Global Development)

Information, Loss Framing, and Spillovers in Pay-for-Performance: Experimental Evidence from Health Workers in Nigeria

Abstract:

A two-stage experiment with health workers in Nigeria disentangles the effect of various aspects of pay-for-performance contracts. In an initial lab-in-the-field experiment, 1,359 health workers are primed with a checklist of salient clinical actions, and then randomized within 690 clinics to receive no incentives, rewards, or penalties for treating hypothetical patients. Both rewards and penalties improve performance by 20 percent and generate spillovers on unincentivized actions, but small incentives capture most gains. Subsequently, lab impacts translate into the real world: exposure to incentives in the lab improves the care provided to real-world patients by 20 percent.

Paper 7

Zhihan Cui, **Lu Liu** (New York University Shanghai)

Opportunity Cost Neglect in Preventive Health Decisions and Mitigating it by Talking Money

Abstract:

Standard health economic models require people to have full awareness the time opportunity costs of falling sick, such as missed work and leisure. Yet, people with bounded rationality may overlook them, showing the bias of opportunity cost neglect (OCN). We propose that this bias commonly exists in judgments about preventive health because opportunity costs are typically less salient and evaluable than direct costs. We show that this bias leads to various behavioral failures, such as insufficient prevention, insensitivity to time duration, and insensitivity to preventive measure efficacy. To mitigate this bias, we designed an intervention entitled “Active Unpacking with Money” (AUM), which directs DMs to actively calculate the monetary losses from experiencing a negative health condition over a specified time period. Through a series of seven consecutive online experiments, we demonstrate that: (1) AUM amplifies people’s perceived severity of health risks and their willingness-to-pay (WTP) for a guaranteed preventive measure; (2) AUM heightens people’s sensitivity to the length of a disease; and (3) AUM bolsters sensitivity to probabilistic information about prevention measure effectiveness. We discuss the practical significance of OCN and AUM as a potential nudging strategy.

Paper 8

Chiara Malavasi, **Han Ye** (University of Mannheim and ETH Zurich)

Live Longer and Healthier: Impact of Pension Income for Low-Income Retirees

Abstract:

We estimate the effect of additional pension benefits on mortality outcomes by exploring the two eligibility criteria of a German pension subsidy program for low-wage workers. Using novel administrative data, we find that eligibility leads to a 2-month delay in age at death (censored at 75). Survey evidence suggests that additional pension income improves both mental and physical health. In addition, individuals feel less financially constrained and are more optimistic about their future. Heterogeneity analysis suggests that the results are mainly driven by men.

Paper 9

Jianjing Lin (University of Massachusetts Amherst), Juan Pantano

Monitoring Pressure and Billing Practices: Evidence from Medicare Recovery Audits

Abstract:

Monitoring has been widely used as a tool to ensure accountability and proper use of resources. However, increased oversight could result in substantial social costs, calling for a scale-back in the level of monitoring. We exploit a dramatic reduction in audit probability and examine how auditees respond to reduced monitoring in the context of Medicare hospital inpatient care. We develop a simple model characterizing hospitals' decision to code admissions intensely and examine how the level of hospitals' improper coding changes in response to variation in monitoring. To test the prediction empirically, we apply a difference-in-differences strategy that leverages differential reductions in audit pressure across diagnostic related groups and find that hospitals tend to code more aggressively admissions for which auditors lowered audit probability more substantially. Our results suggest that there might be a significant cost from scaling back monitoring programs. It might require more thoughtful policy designs to balance the gain from lowering social costs of unnecessary audits, against potentially increased illicit activity arising from reduced monitoring.

Xingguo Wang (Texas A&M), Pourya Valizadeh, Rodolfo M. Nayga, Jr., Henry L. Bryant, Bart Fischer

Broad-Based Categorical Eligibility Policy and SNAP Participation

Abstract:

The Broad-Based Categorical Eligibility (BBCE) policy allows states to bypass federal gross income and asset tests for Supplemental Nutrition Assistance Program (SNAP) eligibility. Policymakers often propose limiting BBCE's scope or eliminating it altogether. Yet, our understanding of BBCE's impact on SNAP enrollment has relied solely on traditional two-way fixed effects (TWFE) estimators, which have been criticized for assuming no treatment effect heterogeneity across states and over time. In this study, using a difference-in-differences estimator that is robust to treatment effect heterogeneity, we provide new estimates of BBCE's impact that are more than twice as large as those derived from the static TWFE models. Importantly, our event-study analysis shows that BBCE's effect has increased uniformly over time across different state groups, which explains the downward bias of the static TWFE model. Additionally, we find that BBCE increased enrollment at all household gross income levels, with the largest percentage effect in the 130%–150% Federal Poverty Guidelines (FPG) bracket. However, our counterfactual simulations show that less than 10% of BBCE's overall effect on SNAP enrollment is due to expanding eligibility to households with incomes exceeding 130% of FPG, and that the policy's main effect comes from increasing participation among already-eligible households.

Paper 11

Partha Deb, **Edward C. Norton** (University of Michigan and NBER), Jeffrey M. Wooldridge, Jeffrey E. Zabel

A Flexible, Heterogeneous Treatment Effects Difference-in-Differences Estimator for Repeated Cross-Sections

Abstract:

This paper proposes a method to estimate treatment effects in difference-in-differences designs in which the treatment start is staggered over time and treatment effects are heterogeneous by group, time, and covariates, and when the data are repeated cross-sections. We show that a linear-in-parameters regression specification with a sufficiently flexible functional form consisting of group-by-time treatment effects, two-way fixed effects, and interaction terms yields consistent estimates of heterogeneous treatment effects under general conditions. The estimates are efficient and aggregation of treatment effects and inference are straightforward. We call it FLEX, because it is a flexible linear model estimated by OLS with covariates (X). We illustrate the use of FLEX with two empirical examples and provide comparisons to other recently derived estimators.

Paper 12

Ruixue Jia, Xiao Ma, **Jianan Yang** (Peking University), Yiran Zhang

Improving Regulation for Innovation: Evidence from China's Pharmaceutical Industry

Abstract:

This study investigates how enhanced regulation can promote innovation, focusing on the impacts of a significant regulatory reform in China's pharmaceutical sector implemented in 2015. Inspired by regulatory practices in the U.S., the reform aimed to address application backlogs and reduce administrative waiting time for new drug development. Using data at the drug and firm levels during 2011--2021, we make three main findings: (1) drug categories experiencing improved approval time witnessed a surge in investigational new drug applications and related clinical trials; (2) despite little improvement in innovativeness (measured by whether drug applications adopt targets already established in the U.S. or Europe) within drug categories, the reform led to changes in firm composition, attracting innovative new firms and boosting overall drug innovativeness; and (3) the market recognized the improvement in regulation, as reflected in stock price adjustments post new drug registrations after the reform. Our findings imply that regulatory barriers can hinder the entry of innovative firms and suggest that latecomers could boost their innovation potential by adopting specific, effective regulatory practices from frontier countries.

Paper 13

Barton H. Hamilton, Brian McManus, **Juan Pantano** (University of Hong Kong and University of Arizona), Justin G. Trogon

Dynamic Treatment Choices and Selection into RCTs: Evidence from Prostate Cancer

Abstract:

We study the design and interpretation of randomized controlled trials (RCTs) that compare medical treatments already in wide use. These RCTs often compare treatments that vary in their curative effectiveness and side effects, plus they can involve dynamic decisions by patients about when to switch to a more aggressive treatment. Although the goal of RCTs is often an estimate of the population average treatment effect (ATE), the above factors induce patient selection into RCTs that generates estimates of a volunteer average treatment effect (VATE) different from the ATE. We demonstrate how to address these issues using a dynamic decision model and empirical methods that combine population and RCT data. We apply our method to treatment strategies for prostate cancer.

Paper P1

Diem Hoang (University of Duisburg-Essen)

Export Growth and Demographic Changes: Evidence from Vietnam

Abstract:

This paper evaluates the impacts of trade liberalization on the marital and fertility choices of women in Vietnam. Applying a regional exposure approach, we leverage the U.S.-Vietnam Bilateral Trade Agreement (BTA) as an exogenous positive shock to the nation's export growth. Our results indicate that young women (aged 18-28) in provinces more exposed to export tariff reductions tend to delay marriage and childbirth. In contrast, we observe no significant impact on the marriage and fertility decisions of older women, nor any changes in sex-selective behavior across the general population. Further analysis reveals that this trade shock does not influence women's participation in the labor force or their employment status, nor does it lead to increased gender segregation in the labor market. The observed delay in marriage and fertility among young women may be attributed to a shift from agriculture to manufacturing and women staying longer at schools.

Paper P2

Fabrice Kämpfen (University College Dublin), Owen O'Donnell, Carlos Riumalló Herl, Xavier Gómez-Olivé

How Effective is Population-Based Screening for Hypertension in South Africa? A Multidimensional Regression Discontinuity Design

Abstract:

There is limited evidence on the effectiveness of population-based screening in restraining the growing burden of non-communicable diseases in low- and middle-income countries. Using data from rural South Africa and a multidimensional regression discontinuity design, we estimate effects of clinical referral after measurement of blood pressure (BP) above diagnostic thresholds for hypertension. Referral has no effect on BP after four years, despite moderately increasing hypertension treatment. For screens that are less likely to be false positive—based on time of day and air temperature—we estimate that referral reduces systolic BP by 5 mm Hg (3.6%) and raises the probability of achieving BP control by 22 percentage points (44%). Population screening for hypertension at conventional diagnostic thresholds may be ineffective unless the rate of false positives can be reduced.

Paper P3

Yinan Liu (Renmin University of China)

Does Telemedicine Alleviate Concerns About Healthcare Accessibility? Evidence from China

Abstract:

This study evaluates the causal impact of telemedicine on individuals' medical concerns within China's healthcare system. Using the quasi-experimental setting provided by the "Promoting Remote Medical Services in Medical Institutions" (PRMS) policy, this research aims to determine whether the growth of telemedicine can alleviate concerns about the accessibility of medical care. A difference-in-differences (DID) approach is adopted to examine the effects of the PRMS policy by comparing the rates of reported medical concerns before and after its introduction across provinces with varying telemedicine infrastructure conditions. The findings reveal a significant reduction in individuals' medical concerns, primarily attributed to improved access to healthcare professionals, without a direct effect on public health status. However, the observed benefits are mainly concentrated in the younger and more educated demographics, suggesting a potential exacerbation of current healthcare disparities. While telemedicine presents significant potential to transform healthcare access, it is crucial for policymakers to ensure that its benefits are equitably distributed.

Paper P4

Makiko Omura (Meiji Gakuin University)

Peer Effects on Healthy Habit Formation Among School Children: Evidence from a Skill-Based Health Education Field Experiment in Bangladesh

Abstract:

This paper explores peer effects in fostering healthy habits among school children, using data from a cluster randomized-controlled trial (RCT) on skill-based health education (SBHE) provided in primary schools in rural Bangladesh. The study reveals significant positive peer effects on all healthy habits, namely, handwashing, dentalcare, and shoe-wearing. The results remain robust across various peer effect measures and highlight the crucial role of peers in forming healthy practices and norms in the school setting, extending beyond the direct treatment effects. These findings underscore the potential of integrating peer dynamics into public health and educational policies to foster sustainable healthy habits among school children.

Paper P5

Pierre-André Chiappori, **David Ong** (Jinan University), Yu Yang, Junsen Zhang

Marrying for Height

Abstract:

Height is associated with many aspects of socioeconomic inequality, especially for males. However, unlike the associated traits, height is readily observable, and thus, may be the basis for the initial sorting among couples. We use novel experimental and empirical data to identify search and matching patterns for mate height and income. We recorded clicks on profiles with randomly assigned height and income information on a major online dating website. Medium and tall men click more on taller female profiles, while short men do not. Women of all heights click more on taller male profiles. Surprisingly, short women reveal in their search rates the strongest aversion to the short men that they end up marrying. Confirming this aversion, household survey data indicate that short wives have the highest willingness to pay (WTP) in terms of the husband's income they sacrifice for an incremental increase in husband height. For short wives, a one cm increase in husband height is equivalent to a 15 percent increase in the husband's income, which is more than twice that of the husband of the medium wife. Only short women's marriage probability decreases with sex ratios absolutely and relative to medium and tall women, whose probability increases. The WTP for height of only short early mothers increases with the local sex ratio. We argue that short women are crowded out of the marriage market by medium and tall women in their endeavor to overcome height and associated socioeconomic inequality for their children.

Paper P6

Nan Xiao, Meng Liu, **Yun Qiu** (Jinan University), Gordon G Liu

The Impact of Ozone on Hospitalizations

Abstract:

This paper examines the effects of ozone pollution on hospitalizations, medical expenditure, and in-hospital death rate using inpatient admission records that cover 1087 hospitals China from 2017 to 2021. Using an instrument variable constructed from ozone concentrations of nearby upwind cities, we find that ozone increases all-cause hospitalizations and medical expenditure. Ozone increases hospitalizations of more diseases than previously found. Hospitalization costs of ozone are of the same order of magnitude as those of PM2.5. Pollution alerts reduce the hospitalization effect of PM2.5 but not ozone. Ozone increases the in-hospital death rates of several diseases, suggesting congestion within and across hospital departments. Overall, Chinese hospitals adapt to PM2.5 better than to ozone.

Paper P7

Margherita Agnoletto, **Martina Repetto** (University of Melbourne)

Gender Mix Prescription: Is it the Cure for GPs' Job Satisfaction and Retention?

Abstract:

This paper investigates the effects of gender composition within general practices on overall job satisfaction, its associated lower-level domains, retention rates and service quality of general practitioners (GPs). Using 11 waves of the nationally-representative Medicine in Australia: Balancing Employment and Life (MABEL) panel, we estimate an individual fixed-effects model addressing endogeneity in several ways. We show that an increase in the female share of GPs within a practice positively influences overall job satisfaction and various well-being components, with female GPs driving the effects. Additionally, we observe a decrease in the likelihood of leaving patient care. We find support for some underlying mechanisms to explain the role of gender composition on job satisfaction. GPs are less likely to report having a poor support network at work when the proportion of women increases. They also experience lower stress in managing the practice and face a reduced probability of physical or verbal aggression from colleagues or supervisors.

Paper P8

Hongyu Guan, **Wei Shi** (Jinan University), Wenjie Wu, Yanwen Yun

Children's Care Policy and Inequality: Evidence from a Health Screening Program in Rural China

Abstract:

This paper examines the distributional effect of vision care screenings on school-aged children's vision, educational and behavioural outcomes using a combination of randomized control trials (RCT) data and longitudinal data on student cohorts in rural China. We first analyze data from a pilot RCT study with multiple treatment interventions. Our results show that screenings, when coupled with follow-up actions, improve children's vision, generate significant impacts on their math test scores and behavioral outcomes, and reduce the social gradient in health. We then study the introduction of a large-scale vision care program, and leverage the exogenous variations in the timing of the program's rollout for the cohort difference-in-differences identification. Our analysis confirms the external validity of the RCT findings and finds that sustained health screenings enhance compliance with prescribed treatment. These findings support care policy implications of equigenesis that access to screenings can buffer social-health gradient inequalities in a low-cost manner.

Paper P9

Meiping Aggie Sun (Fordham University), Yinhe Liang, Xiaobo Peng

Long-Term Impacts of Growth and Development Monitoring: Evidence from Routine Health Examinations in Early Childhood

Abstract:

This paper examines the long-term impacts of growth and development monitoring in early childhood. For this purpose, we evaluate a public health program, the Systematic Management of Children (SMC), which offers growth and development monitoring through routine health checkups for all young children (0-6 years) in China. Using data on the program's county-by-county rollout, we find that full exposure to the SMC from birth increases adult income by 5%. We further provide evidence that the introduction to the SMC leads to improved physical and mental health, better educational outcomes, increased cognitive skills, and sustained use of routine health checkups among adolescents.

Paper P10

Yun Xiao (University of Gothenburg)

Family Planning Policies, Heterogeneous Child Quality-Quantity Trade-off, and Intergenerational Mobility

Abstract:

This article establishes a causal link between family planning policies and intergenerational mobility, arising from heterogeneity in the child quality-quantity trade-off. Using variations in penalties for unauthorized births under China's One-Child Policy, I find that the policy reduces the likelihood of having a second child and improves the firstborn's health. However, education increases only among children of high-skill workers, which further increases their income. Conversely, children of farmers or low-skill workers accumulate more land or housing assets. The heterogeneous responses are driven by different returns and costs of education associated with paternal occupations. The increase in policy-induced penalties accounts for one-fourth of the increases in intergenerational correlations in income between the 1969-1978 and 1979-1988 cohorts. The results underscore the importance of considering heterogeneity in parental responses when evaluating family planning policies.

Paper P11

Wei Yan, **Hanmo Yang** (Stanford University), Junjian Yi, Chuanchuan Zhang

Hospital Heterogeneous Responses to a Blended Payment Scheme Reform and the Distributional Consequences

Abstract:

Hospital payment schemes designed to control health expenditure could also influence the allocation of medical resources, which is crucial for efficient healthcare delivery in developing countries, where substantial health challenges persist but resources remain limited. This paper studies the effects of hospital responses to a blended payment scheme—a diagnosis-based payment scheme with a global budget—and the distributional consequences of hospital heterogeneous responses. Exploiting a quasi-experimental reform in China in 2016, we find hospitals responded along multiple dimensions: upcoding, raising the shares of admissions in categories with higher upcoding potential, and increasing the total number of admissions. Hospitals' heterogeneous responses led to a widened disparity in hospital payments, which is mainly driven by heterogeneous upcoding across hospitals. Hospitals with more knowledge about coding practices, greater exposure to the reform, higher tier, and larger size respond more strongly to the reform, therefore securing a larger portion of the global budget from the social health insurance fund.

Paper P12

Xinxin Chen, Jin Feng, Zhen Wang, **Dandan Yu** (Macquarie University)

Insurance Coverage for Chronic Diseases and Healthcare Utilization among Low-Income Populations: Evidence from China

Abstract:

Patient cost-sharing can lead to delays in necessary care, especially among low-income populations. In this study, we examine the impact of health insurance coverage for chronic disease treatments in outpatient care, using an administrative insurance claims dataset from a low-income population in an underdeveloped city in China. Employing a propensity score matching and difference-in-differences approach, we find that outpatient coverage for certain chronic diseases increased outpatient utilization and expenses among patients with these conditions. Interestingly, these patients also increased their use of inpatient services, despite no changes in the cost-sharing for inpatient care. Our findings suggest the presence of delayed care, where outpatient visits helped patients recognize their medical needs and increased their demand for inpatient care. These results have important implications for the implementation of universal health coverage and the containment of healthcare costs in low- and middle-income countries.