

Economic Scholars Program

2026 Economic Scholars Program

Federal Reserve Bank of Cleveland

Friday, April 17, 2026

9:00–9:45 am	Arrival and Breakfast
9:45–9:55 am	<p>Welcome and Opening Remarks</p> <p>Pianalto Auditorium</p> <p>Edward S. Knotek, II, Senior Vice President and Director of Research Bio</p> <p>Beth M. Hammack, President and Chief Executive Officer Bio</p>
9:55–10:05 am	Break
10:05–11:05 am	<p>Morning Session 1</p> <p>Pianalto Auditorium</p> <p>Session Chair: Allison Osei-Okrah, Junior, The College of Wooster</p> <p>Chloe Christen, Junior, Ohio University <i>Did the Rise of Ultra-Processed Foods Reshape the BMI-Poverty Gap? An Analysis of Income-Based BMI Trends</i></p> <p>Payton Garcia, Junior, Howard University (Virtual) <i>Factories or Flux? Deciphering the Partisan Signature of EDI in Ghana's Fourth Republic</i></p> <p>Tyler Sotomayor, Senior, and Gabriel Uceda-Sosa, Junior, Columbia University <i>Heterogeneous Effects of Merit-Based Aid on Institutional Access</i></p> <p>Discussant: Anika Kaur, Junior, Case Western Reserve University</p> <p>Cincinnati Room</p> <p>Session Chair: Fiona Arado, Junior, Case Western Reserve University</p> <p>Bat-Enerelt Ulambayar, Senior, The College of Wooster <i>Coal, Cold and Clear Air: Impact assessment of raw coal ban on Mongolian Household Emissions and Pollutant levels</i></p> <p>Renee Tetlow, Senior, Allegheny College <i>The Relationship between R&D and Financial Performance of Renewable Energy Firms</i></p> <p>Evelina Sheridan, Senior, Hamilton College <i>More buyers, less problems? An examination of Ghana's 1992/1993 cocoa market partial liberalization on child health outcomes</i></p> <p>Discussant: Chidiebere Christabel Nnubia, Senior, Chukwuemeka Odumegwu Ojukwu University (Virtual)</p>
11:05–11:15 am	Break

11:15 am–12:15 pm	<p>Morning Session 2 Pianalto Auditorium Session Chair: Aahna Sinha, Sophomore, University of Pittsburgh</p> <p>Ahmad Alexander, Senior, Pace University <i>The Causal Impact on Bus Lane Coverage on Ridership and Speed in New York</i></p> <p>Joy Cheng, Junior, Emory University (Virtual) <i>Adaptive Conjoint Analysis of Threshold Effects in Refugee Return Intentions</i></p> <p>Neha Yadavalli, Freshman, Northwestern University <i>Does access to AI writing tools improve academic performance more for lower-income students than higher-income students?</i></p> <p>Discussant: Richard Li, Sophomore, University of California, Berkeley (Virtual)</p> <p>Cincinnati Room Session Chair: Karina Ismailova, Sophomore, Berea College</p> <p>Mara Dukuly, Junior, University of Minnesota (Virtual) <i>War and Literacy: Regional, Ethnic, and Cohort Effects from the Liberian Civil Wars</i></p> <p>Kara Hooppell, Senior, Pennwest University – Edinboro Campus <i>The Effect of U.S. Consumer Price Index Surprises on EUR/USD Volatility</i></p> <p>Tyler Hartman, Senior, University of North Carolina Wilmington <i>The Impact of the Minimum Legal Age Increase on Tobacco Use Across Demographics</i></p> <p>Discussant: Leah Mokry, Senior, Agnes Scott College (Virtual)</p>
12:15 pm–1:00 pm	<p>Lunch Pianalto Auditorium</p>
1:00–1:45 pm	<p>Perspectives on Careers in Economics – Panel Discussion Pianalto Auditorium</p> <p>Moderator: James Mitchell, Vice President Bio</p> <p>Panelists:</p> <ul style="list-style-type: none"> • Kevin Jacobson, Research Analyst Bio • André Victor D. Luduvicé, Research Economist Bio • Chengcheng Jia, Research Economist Bio • Kevin Rinz, Senior Research Economist Bio • Rory G. Quinlan, Research Analyst Bio
1:45–2:00 pm	<p>Break</p>

2:00–3:00 pm	<p>Afternoon Session 3 Pianalto Auditorium Session Chair: Mrunmayi Warade, Sophomore, The Ohio State University</p> <p>Oliver Ng, Junior, Pace University <i>Sports Betting & Financial Deterioration. The effect of online sports betting legalization on consumer finances</i></p> <p>Stevi Dugas, Senior, University of Richmond <i>The Differential Effects of Food Aid & Agricultural Input Aid on Household Consumption: A Case Study of Agricultural Households in Malawi</i></p> <p>Matthew Posego, Senior, Pennwest University - Edinboro Campus Consolidation in Healthcare: The Effect of Hospital Acquisitions on Patient Pricing</p> <p>Discussant: Unavailable</p> <p>Cincinnati Room Session Chair: Gideon Hurtado-Sher, Sophomore, Oberlin College</p> <p>Sidharth Jindal, Junior, Case Western Reserve University <i>Bayesian Analysis of Event Studies for Securities Litigation: Time Series Improvements</i></p> <p>Jesse Boockvar-Klein and Camryn Yates, Seniors, Case Western Reserve University <i>The Effect of Facebook's Rollout to Colleges on College Students' Voter Participation</i></p> <p>Hridhika Vora, Senior, The University of Akron <i>How Do Automatic Expungement Laws Affect Crime Rates Across U.S. States?</i></p> <p>Discussant: Sara Singh, Senior, The College of Wooster</p>
3:00–3:10 pm	Break
3:10–4:10 pm	<p>Afternoon Session 4 Pianalto Auditorium Session Chair: Kaitlin Wang, Freshman, Case Western Reserve University</p> <p>Petr Beránek, Junior, Sacred Heart University <i>The Alcohol Paradox: Do Drinkers Weigh Less? Evidence from National Health Data</i></p> <p>Marine Kang, Senior, The College of Wooster <i>Not Everyone Recovers from Disaster in the Same Way: Wildfire Risk, Insurance Premiums, and Income-Stratified Migration in California</i></p> <p>Brandon Chan, Senior, Yale University (Virtual) Corrective Overoptimism</p> <p>Discussant: Emily Tutt, Senior, University of Kentucky</p>

	<p>Cincinnati Room Session Chair: Devarth Patel, Junior, The Ohio State University</p> <p>Dang Nguyen, Junior, Union College <i>Investing Isn't Just Math: Behavioral Biases and Student Market Participation</i></p> <p>Shams Sathin, Junior, University of Cincinnati <i>The Geography of Intergenerational Poverty Revisited: How Urban and Rural Poverty Shape Life Chances</i></p> <p>Hannah Kelly, Senior, The University of Akron <i>Women's Work and Wealth: Measuring the Impact of Incremental Liberations, 1850-1870</i></p> <p>Discussant: Cole Butterfield, Senior, Hope College</p>
4:10–4:15 pm	Break
4:15–4:30 pm	<p>Closing Remarks Pianalto Auditorium Edward S. Knotek, II, Senior Vice President and Director of Research</p>
4:30–6:00 pm	<p>Networking Reception Cleveland Room</p>

Peer Review Board Members

We would like to extend our thanks to the Peer Review Board members whose evaluations resulted in the selection of the proposals for this year's program:

Reviewer	School
Ariel Berk	Case Western Reserve University
Brandon Chan	Yale University
Chloe Christen	Ohio University
Arun Dahal Khatri	University Of Maryland - Baltimore County
Grace Etzel	Trinity University
Rohan Fernando	Purdue University
Roaya Ghuneim	St. Olaf College
Conor Grew	Sacred Heart University
Camilla Hope	Agnes Scott College
Jakeb Hurley	University of Kentucky
Yangyang (Stone) Jiang	The Ohio State University
Anika Kaur	Case Western Reserve University
Elizabeth Krotine	Case Western Reserve University
Jewon Lee	The George Washington University
Lorelei Lin	Williams College
Spencer Ma	The George Washington University
Ryan Mahoney	The Ohio State University
Troy Makowski	University of Dayton
Mmesoma Mbama	Chukwuemeka Odumegwu Ojukwu University
George Merrifield	Case Western Reserve University
Leah Mokry	Agnes Scott College
Adaye Sosthene Yva N'guettia	Macalester College
An Nguyen	Oberlin College
Chidiebere Christabel Nnubia	Chukwuemeka Odumegwu Ojukwu University
Veronica Ortiz	University of Notre Dame
Jungwoo (James) Park	The George Washington University
Devarth Patel	The Ohio State University
Alessandra Pedinelli	University of Michigan
Zaeda Peter	Carleton College
Ali Pinargozu	Istanbul Bilgi University
Aarju Poudel	Williams College
Heidi Quist	University of Pittsburgh
Pranavi Rebala	University of Connecticut
Evelina Sheridan	Hamilton College
Adhyuth Sriramanathan	University of Illinois Chicago
Benny Torres	Texas A&M University
Emily Tutt	University of Kentucky
Bat-Enerelt Ulambayar	The College of Wooster
Zev van Zanten	Duke University
Isabel Weihrauch	The Ohio State University

Caroline Wu	Stanford University
Gabriel Salvatore Xavier Saccoccio	Allegheny College
Amy (Grey) Yang	University of Pittsburgh
Chloe Younis	The University of Notre Dame
Yaqi (Gia) Zhang	University of Kentucky

Additionally, we extend our sincere gratitude to the following professors who provided training to the students preparing for their conference roles:

- **Jenny Hawkins**, Case Western Reserve University—*How to Prepare a Conference-Ready Proposal*
- **Liuling Liu**, Bowling Green State University and **Gaiyan Zhang**, University of Missouri–St. Louis—*Peer Review Board Training*
- **John Duca**, Oberlin College—*How to Prepare an Effective Conference Presentation*
- **Asawari Deshmukh**, University of Cincinnati and **Chelsea Dowell**, Tennessee Technological University—*Discussant Training*

Morning Session 1

Pianalto Auditorium Abstracts

Author: **Chloe Christen**, Junior, Ohio University

Paper: *Did the Rise of Ultra-Processed Foods Reshape the BMI-Poverty Gap? An Analysis of Income-Based BMI Trends*

Abstract: The obesity epidemic in the United States began in the late 1970s and early 1980s, coinciding with a sharp increase in the availability and consumption of ultra-processed foods (UPFs). Given that individuals in poverty often face barriers to accessing nutritious foods, they may be disproportionately affected by this shift in the food system. This research examines whether there is a significant difference in body mass index (BMI) among individuals in poverty compared to those not in poverty, before and after the rise of UPFs. Using generalized random forests and linear regression models, I analyze BMI data across key time periods and compared trends between individuals in poverty and those not in poverty. The results indicate significant differences between these groups, with notable shifts in BMI patterns after the rise of UPFs. These findings suggest that UPFs may be a contributing factor to the obesity crisis and that individuals in poverty experience unique BMI trends, highlighting potential health inequities. Understanding these patterns could help inform future policy interventions aimed at reducing obesity rates and ensuring that individuals in poverty are not disproportionately at risk.

Author: **Payton Garcia**, Junior, Howard University

Paper: *Factories or Flux? Deciphering the Partisan Signature of FDI in Ghana's Fourth Republic.*

Abstract: This project enters the debate over whether democratic party alternation in Sub-Saharan Africa produces measurable differences in economic policy outcomes, a question that scholarship on Ghana's investment climate has addressed theoretically but rarely tested through systematic quantitative comparison across administrations. This study argues that the sectoral composition of GIPC-registered foreign direct investment projects shifts significantly with changes in government in Ghana's post-oil period, with manufacturing's share of annual registrations 15.5 percentage points higher under NPP than NDC governance, but that this difference vanishes in the pre-oil era, suggesting that party industrial policy priorities become legible to investors only when a structural transformation in the investment environment has already differentiated the sectoral landscape. Drawing on 29 annual observations from the Ghana Investment Promotion Centre's sectoral registration records spanning 1995 to 2024, the study tracks the manufacturing share of all registered FDI project counts across four administrations, NDC Rawlings (1995–2000), NPP Kufuor (2001–2008), NDC Mills/Mahama (2009–2016), and NPP Akufo-Addo (2017–2024), and applies Mann-Whitney rank-sum tests within two structurally defined sub-periods separated by Ghana's 2007 Jubilee oil field discovery. The analysis yields three findings: no significant manufacturing share difference between NPP and NDC in the pre-oil period ($\Delta = -2.2$ percentage points, $p = 0.755$); a statistically significant and large post-oil divergence, with NPP Akufo-Addo recording a median manufacturing share of 34.1% against NDC Mills/Mahama's 18.6% ($p = 0.009$, rank-biserial $r = 0.82$); and evidence that this divergence is partly denominator-driven, as total GIPC registrations fell from a peak of 514 in 2011 to 140 by 2024 while raw manufacturing counts remained comparatively stable. These findings suggest that party-level industrial policy signals, particularly NPP's One District One Factory initiative and targeted manufacturing incentives, may shape the composition but not the volume of FDI registrations, and that identifying genuine policy effects in rapidly transforming economies requires sub-period designs that isolate structural breaks from electoral ones.

Author: **Tyler Sotomayor**, Senior, Columbia University; **Gabriel Uceda-Sosa**, Junior, Columbia University

Paper: *Heterogeneous Effects of Merit-Based Aid on Institutional Access*

Abstract: State merit-based scholarship programs are frequently criticized for disproportionately benefiting students from higher-income families. This paper evaluates the impact of such programs on institutional access by examining changes in the socioeconomic composition of public colleges. We exploit cohort-by-sector variation induced by the introduction of Tennessee's HOPE merit scholarship program, implementing a dynamic event-study design that contrasts

public and private institutions. Following program implementation, public institutions experience a significant decline in the average parental income rank of enrolled students, alongside increased representation from lower-income quintiles. In contrast, private institutions exhibit little change in socioeconomic composition. These findings suggest that merit-based aid can expand access at public institutions by strengthening enrollment of students from less affluent backgrounds. Overall, the results contribute to ongoing debates over the distributional consequences of merit-based aid and its role in shaping access to higher education.

Cincinnati Room Abstracts

Author: **Bat-Enerelt Ulambayar**, Senior, The College of Wooster

Paper: *Coal, Cold and Clean Air: Impact assessment of raw coal ban on Mongolian Household Emissions and Pollutant levels*

Abstract: This study examines changes in household emissions and urban air quality following Mongolia's 2019 ban on raw coal in Ulaanbaatar. Residential coal combustion in ger districts has long been the main source of severe winter air pollution in the city. In response, the Government of Mongolia (GoM) prohibited the use of untreated raw coal in urban residential heating and introduced refined coal briquettes as a substitute fuel. Using data on annual household energy consumption from the Mongolian National Statistics Committee between 2015 and 2024, this study constructs carbon dioxide (CO₂) emissions from domestic coal consumption and evaluates changes in emissions patterns using an interrupted time-series framework. Station-level pollution data are also incorporated to examine trends in particulate matter concentrations. The results indicate that the period following the ban on raw coal is associated with lower household coal-combustion emissions and noticeable improvements in urban air quality, particularly for particulate pollution.

Author: **Renee Tetlow**, Senior, Allegheny College

Paper: *The Relationship between R&D and Financial Performance of Renewable Energy Firms*

Abstract: The ability of energy firms to address the climate change crisis and meet the growing demand for energy depends on their financial success. There is controversy in the literature about the relationship between corporate R&D investment, government energy policy, and the financial success of energy firms. Results from empirical research on this relationship have been mixed, partly because of the mis-specification of the econometric models used in these studies. This study uses two-way fixed effect models, with panel data from 22 energy firms covering 20 years to explore the relationship between R&D and financial performance. Our preliminary results suggest that R&D boosts the financial performance of energy firms in both the short and long run. Contrariwise, firms that perform better financially are less likely to invest in R&D. Government policy was found to be effective in encouraging investment in R&D in the renewable energy sector. One policy implication is that the government should subsidize investment in corporate R&D to boost corporate profits, and encourage energy firms to stay in business.

Author: **Evelina Sheridan**, Senior, Hamilton College

Paper: *More buyers, less problems? An examination of Ghana's 1992/1993 cocoa market partial liberalization on child health outcomes*

Abstract: I examine the effects of the partial market liberalization of Ghana's cocoa market on child long- and short-term health outcomes. Using Demographic Health Survey data in a difference-in-differences model, I show that on average being a child in a cocoa-growing region is associated with a decrease in height, and a decrease in the probability of whether the child had a cough or fever, as compared to without the policy. These results imply that the impact is more complex than a positive or negative relationship.

Morning Session 2

Pianalto Auditorium Abstracts

Author: Ahmad, Alexander, Senior, Pace University

Paper: *The Causal Impact on Bus Lane Coverage on Ridership and Speed in New York*

Abstract: Over the past two decades bus ridership in New York City has significantly declined, driven by slower service and increased traffic congestion. Since COVID-19, public transportation has taken a significant hit, with ridership falling and uneven recoveries across transit modes. While rail systems have struggled to regain pre-pandemic usage, bus service has emerged as one of the most resilient forms of public transit, recovering more quickly and maintaining a critical role in daily mobility. Since then, bus lanes have emerged as a low-cost infrastructure solution to restore reliability, but causal evidence on their effectiveness remains limited. This paper asks whether expanding bus lane coverage improves bus speed and reliability, and whether those improvements translate into increased ridership. The data spans from 2020 to 2024 using a route-level panel dataset covering 333 NYC bus routes. To identify the causal effect of bus lane expansion on monthly ridership and average speed a two-way fixed effects difference-in-differences model is used. The results from this show that a 10-percentage point increase in bus lane coverage increases monthly ridership by approximately 1.35 percent and average speed by 0.061 mph. These findings support bus lanes as a cost-effective and worthwhile transit investment that improves both service reliability and ridership.

Author: Jiuyi (Joy) Cheng, Junior, Emory University

Paper: *Adaptive Conjoint Analysis of Threshold Effects in Refugee Return Intentions*

Abstract: This research investigates the return intentions of the displaced population. Challenging the standard economic model of compensatory trade-offs, we posit that return intentions are governed by threshold effects (non-negotiable minimum acceptance level), primarily driven by domains of political regime change and livelihood viability. We structured an original, adaptive conjoint experiment administered via Qualtrics to present hypothetical return scenarios. The econometric analysis focuses on standard average marginal component effects (AMCEs) and potential discontinuities indicative of threshold behavior in return intentions. The pilot study with Colombian refugees currently located in Clarkston, GA, supports the feasibility of our experimental design to be fully implemented in Venezuelan refugees in Medellin, Colombia. The research aims to provide a more realistic model of refugee decision-making, with implications for the design of repatriation programs and post-conflict policy, arguing that interventions below thresholds in key dimensions may have a negligible impact on return rates.

Author: Neha Yadavalli, Freshman, Northwestern University

Paper: *Does access to AI writing tools improve academic performance more for lower-income students than higher-income students?*

Abstract: The growing use of AI writing tools (AIWT) in classrooms has raised new questions about how these technologies affect educational inequality. This study examines whether AIWT improves writing performance more for lower-income students than for higher-income students. Using student-level data from U.S. high schools, this study compares writing performance before and after schools adopt AI writing tools. A difference-in-differences approach is used to evaluate whether these tools narrow or widen the writing achievement gap.

Cincinnati Room Abstracts

Author: Mara Dukuly, Junior, University of Minnesota

Paper: *War and Literacy: Regional, Ethnic, and Cohort Effects from the Liberian Civil Wars*

Abstract: On Christmas Eve 1989, a Libyan-backed rebel group led by Charles Taylor invaded Liberia, sparking the First Liberian Civil War, which lasted until 1997. A second conflict followed in 1999 and ended in 2003. After nearly a decade and a half of civil war, Liberia is one of the poorest countries in the world and half of the population is illiterate. This paper examines the effects of the First and Second Liberian Civil Wars on literacy by county, cohort, and ethnicity. Using cross-sectional data from the Standard Demographic and Health Surveys (DHS 2007, 2013, 2019) and the Uppsala Conflict Data Program, I construct a weighted treatment variable measuring the total share of conflict deaths per county for individuals who were primary school-aged during the war.

In a survey-weighted linear probability model, I interact total death exposure with county, birth cohort, and ethnicity for individuals born between 1964 and 1998, holding survey year, gender, and urban status constant. I find that nearly every county in Liberia showed statistically significant lower levels of literacy. Individuals who resided in more literate counties, such as Montserrado, also showed negative effects on literacy probability to the reference county. Cohorts born between 1982 and 1993, during the First and or Second Civil War, exhibit significantly lower literacy probabilities relative to the pre-war cohort. Among ethnic groups, the Gio, who formed the core of Taylor's NPFL forces and were largely shielded from targeting, show a significant positive interaction, while the Mandingo, a highly targeted tribe, along with the Krahn and Mano, exhibit negative but statistically insignificant interactions. These findings suggest that the Liberian Civil Wars disrupted literacy through geographic and cohort channels, in addition to the tribalism shaped by wartime political alignments.

Author: Kara Hooppell, Senior, Pennwest University – Edinboro Campus

Paper: *The Effect of U.S. Consumer Price Index Surprises on EUR/USD Volatility*

Abstract: This study examines whether differences between expected and actual U.S. Consumer Price Index (CPI) values, referred to as CPI surprises, lead to greater short-term volatility in the EUR/USD exchange rate. The analysis uses monthly CPI releases from January 2015 through October 2025 (Tradingview, 2025). We find that CPI surprises have a statistically significant but economically modest effect. More importantly, volatility surrounding CPI announcements tends to persist across months. This persistence contributes to short-term volatility during newly released monthly CPI data. Expanding the sample with additional CPI releases could improve the reliability of the estimates and provide a clearer understanding of these effects. This framework could be extended to other major economic announcements to examine how scheduled news events influence currency markets.

Author: Tyler Hartman, Senior, University of North Carolina Wilmington

Paper: *The Impact of the Minimum Legal Age Increase on Tobacco Use Across Demographics*

Abstract: This study examines how raising the minimum legal age for purchasing tobacco affects tobacco use. Linear probability models with state fixed effects are used to estimate the association between T21 exposure and smoking and vaping. My models show that T21 policy reduces smoking and vaping among young adults and high school students. However, the magnitude of the reductions varies across demographics. The effects are weaker for Black individuals and females. Overall, the results suggest that T21 policy is linked to lower tobacco use, but its impact is not the same across demographics.

Afternoon Session 3

Pianalto Auditorium Abstracts

Author: Oliver Ng, Junior, Pace University

Paper: *Sports Betting & Financial Deterioration. The effect of online sports betting legalization on consumer finances*

Abstract: After the overturning of the Professional and Amateur Sports Protection Act (PASPA) in 2018, sports betting became legalized in 39 states. Coinciding with this new development has been the rise of online gambling. There being decreased friction in access to gambling services means that households have more of an opportunity to engage with potentially financially detrimental behavior. We study how the implementation of online sports betting has affected consumer's financial health. We utilize household credit card delinquency rates as a proxy for the purposes of this paper as it measures an inability to pay off short term debt. Our data is primarily pulled from the New York Federal Reserve's Consumer Credit Panel which collects data on a 5% sample of filings from Equifax. The main finding of our paper is that states that have legalized online sports betting saw a 4-percentage point increase in credit card delinquencies compared to states that do not. This coincides with an increase in unemployment rates, and auto loan delinquencies as well. As consumers become more open to risk taking, they take on greater burdens on their finances. These results demonstrate that broad legalization of sports has harmed household financial health by reducing their ability to pay down debt.

Author: Stevi Dugas, Senior, University of Richmond

Paper: *The Differential Effects of Food Aid & Agricultural Input Aid on Household Consumption: A Case Study of Agricultural Households in Malawi*

Abstract: In 2024, the UN World Food Program provided assistance to 124.4 million people worldwide, including both direct food aid and agricultural aid (WFP, 2025). Though both forms of aid aim to reduce poverty through improved food access, it is unclear which program is better suited to the broader objective of poverty reduction and increased consumer spending. This study seeks to fill this gap in the literature by examining whether agricultural-input aid affects household consumption differently than food aid among Malawian agricultural households. Employing a Fixed Effects (FE) model with nationally representative panel data spanning 2010-2019, I test whether receiving subsidized seed and fertilizer generates different consumption outcomes than receiving free corn. This research contributes to the broader policy debate on optimal aid composition by providing rigorous empirical evidence on the differential effects of production-oriented (agricultural aid) versus consumption-oriented (food aid) interventions on household spending.

Author: Matthew Posego, Senior, Pennwest University – Edinboro Campus

Paper: *Consolidation in Healthcare: The Effect of Hospital Acquisitions on Patient Pricing*

Abstract: This research examines the relationship between hospital consolidation and patient costs. This research is motivated by the ongoing concerns regarding rising healthcare costs and increased merger activities within the industry. This study aims to provide evidence on whether hospital acquisitions are associated with increases in patient prices compared to non-acquired hospitals. Using a difference-in-differences framework, we examine changes in financial measures before and after hospital acquisitions. Patient costs are evaluated indirectly through net income and cost-to-charge ratios (CCR), which provide insight into potential pricing increases following acquisitions. The analysis finds a statistically significant increase in these pricing measures relative to the control hospitals. These findings suggest that hospital consolidation may contribute to higher patient costs through increased pricing power.

Cincinnati Room Abstracts

Author: Sidharth Jindal, Junior, Case Western Reserve University

Paper: *Bayesian Analysis of Event Studies for Securities Litigation: Time Series Improvements*

Abstract: If a publicly traded firm misreports or omits information that a reasonable investor would want to know when deciding to invest, and such omission results in a drop in the stock price, a shareholder may sue for harm. The shareholder's challenge is to show that the lower stock price was caused by the omission of information. In securities litigation, this analysis relies on the

event study methodology. Single-firm event study inference has classically been conducted in frequentist “null hypothesis” frameworks. Recent work has demonstrated flaws in this frequentist framework and offered a single-firm event study method rooted in the Bayesian framework. This Bayesian event study methodology, however, suffers from a time homogeneity assumption related to the volatility of a firm’s security price, which may influence the outcome for a given case. This research utilizes volatility modeling developed in financial literature to correct for this assumption in the Bayesian framework. We demonstrate this solution with a case study and validate our method with useful convergence properties.

Author: **Jesse Boockvar-Klein**, Senior, Case Western Reserve University; **Camryn Yates**, Senior, Case Western Reserve University

Paper: *The Effect of Facebook’s Rollout to Colleges on Students’ Voter Participation*

Abstract: Social media platforms have reshaped how young people engage with the world, yet their causal effect on political participation remains poorly understood. This paper examines whether the rollout of Facebook across U.S. college campuses increased student voter turnout. Between 2004 and 2006, Facebook expanded access sequentially by campus, creating plausibly exogenous variation in when students first encountered the network. We use precinct-level voter turnout data from the 2004 general election across five U.S. states, matched to Facebook’s campus-by-campus expansion timeline using institutional coordinates and state precinct databases. Our variable of interest is an indicator for whether a precinct falls within a defined buffer of a campus that gained Facebook access prior to the November 2004 election. We implement a difference-in-differences design comparing turnout changes in precincts near early-adopting campuses to those near campuses that received access after the election. Our preferred specification includes precinct fixed effects with standard errors clustered at the county level. We find statistically significant increases in voter turnout in Pennsylvania and Wisconsin, with positive but insignificant effects in California, North Carolina, and Virginia. These results suggest that lowering the cost of political information sharing among peers can meaningfully activate young voters.

Author: **Hridhika Vora**, Senior, The University of Akron

Paper: *How Do Automatic Expungement Laws Affect Crime Rates Across U.S. States?*

Abstract: This paper examines whether the adoption of automatic expungement laws is associated with changes in crime rates across U.S. states. Using a state-level panel dataset combining FBI Uniform Crime Report data with expungement policy adoption information and economic controls from 2010 to 2024, the study analyzes variation in violent and property crime rates across states and over time. The analysis employs regression models with state and year controls to estimate the relationship between expungement policy adoption and crime outcomes. The study contributes to the literature on record remediation policies by evaluating whether automated expungement laws are associated with broader public safety outcomes.

Afternoon Session 4

Pianalto Auditorium Abstracts

Author: Petr Beránek, Junior, Sacred Heart University

Paper: *The Alcohol Paradox: Do Drinkers Weigh Less? Evidence from National Health Data*

Abstract: This paper studies the relationship between alcohol consumption, physical activity, and Body Mass Index in U.S. adults. Obesity affects over 42% of the American population, with annual medical costs exceeding \$170 billion.(Flegal et al.). Understanding what drives body weight is critical for public health policy. Using data from the National Health Interview Survey (NHIS) spanning 2010–2018, we analyze 213,435 U.S. adults with complete information on BMI, alcohol consumption frequency, and strength training frequency. We apply Ordinary Least Squares (OLS) regression with demographic controls for age, sex, marital status, and race to isolate the independent effects of each behavior. Results show that strength training frequency is negatively associated with BMI ($\beta = -0.648$, $p < 0.001$), consistent with expectations. More surprisingly, alcohol consumption is also negatively associated with the metric ($\beta = -0.388$, $p < 0.001$). This reflects the "alcohol paradox" documented in prior literature, where light-to-moderate drinkers tend to have lower mass index than non-drinkers.(Sayon-Orea et al.; Breslow and Smothers; Traversy and Chaput). Both findings are statistically significant and stable across model specifications. These results confirm our expectations of the complex relationship between lifestyle behaviors and body weight. Limitations include the cross-sectional design, which prevents causal interpretation, and the absence of dietary data, which is a key driver of the BMI.

Author: Marine Kang, Senior, The College of Wooster

Paper: *Not Everyone Recovers from Disaster in the Same Way: Wildfire Risk, Insurance Premiums, and Income-Stratified Migration in California*

Abstract: Over the past few decades, the frequency of wildfires in California has increased. Wildfires have reshaped not only the physical landscape but also economic and institutional systems. According to WFLC (2022), the Camp Fire destroyed the town of Paradise and displaced approximately 52,000 residents in a single week in 2018. California experienced its most destructive wildfire seasons on record in 2017 and 2018 alone. These events triggered a cascade of institutional responses, including dramatic insurer withdrawals, premium increases of up to 80%, and a rapid expansion of the California FAIR Plan (Boomhower et al., 2025). However, the deepest consequences of these events may not be the fires themselves, but the institutional pricing of wildfire risk. This study examines different migration responses across household income groups following wildfire exposure in California. While wildfire disasters are often assumed to cause direct population relocation, this study proposes a different mechanism. By focusing on property insurance markets as the key institutional response to wildfire risk, this research argues that insurance pricing translates wildfire exposure into economic pressures that reshape residential mobility. To test these mechanisms, I construct a ZIP-quarter panel dataset (2017–2023). The main dependent variable is obtained from USPS data, which I merge with CAL FIRE data, Census, and Redfin data. The analysis employs threshold-based event-study models, income-heterogeneous difference-in-differences specifications, and distributed lag models of wildfire intensity. Preliminary results suggest that wildfire exposure does not cause large-scale exit but instead creates a short-run "mobility freeze." Over time, however, migration responses diverge across income groups, particularly among lower-income households, suggesting gradual spatial sorting.

Author: Brandon Chan, Senior, Yale University

Paper: *Corrective Overoptimism*

Abstract: Booms in infrastructure investment – railways in the 1840s, electricity in the 1920s, fibre in the 1990s – often coincide with investor exuberance and dramatic losses. But the infrastructure remains long after these episodes. I show that overoptimistic investors can correct a general class of market failure: agents with diagnostic expectations over-extrapolate good news and conduct irreversible investments, pushing what was once a market failure toward the efficient level. This mechanism – corrective overoptimism – is embedded in a model of spatial development with endogenous infrastructure and estimated on data from England and Wales, 1700–1881, spanning the canal and railway booms. Corrective overoptimism can be a potent channel of growth.

Cincinnati Room Abstracts

Author: Dang Nguyen, Junior, Union College

Paper: *Investing Isn't Just Math: Behavioral Biases and Student Market Participation*

Abstract: Albert Einstein once said, "Compound interest is the 8th wonder of the world."

Leveraging its full potential requires starting to invest early; however, many college students fail to do so, despite the widespread accessibility of financial resources and investing apps today. Students are surrounded by investing apps, social media flooded with finance content, and conversations about the market with peers, therefore additional factors must also play a role in students' decisions to invest or not. In my proposed research, I examine the role of behavioral biases in students' investment decisions by testing three key behavioral channels: prospect-theory tendencies (loss aversion and reference dependence), overconfidence, and herd behavior, to determine whether they help explain differences in investment participation. The data is collected by distributing a Qualtrics survey to currently enrolled U.S. college students (community college, undergraduate, master's, and PhD) recruited through CloudResearch. The survey includes short questions that measure each channel and a standard financial literacy module. Responses are coded, and some are combined into index measures, with higher values indicating stronger bias tendencies. Using a sample of 230 respondents, I estimate logistic (and probit) regression models with investment participation as the dependent variable, including all bias measures (in index and disaggregated components), controlling for financial literacy, gender, and employment status. Preliminary results show that herd behavior and overplacement (an overconfidence component) are positive and statistically significant predictors of participation, while the prospect-theory measures are not significant in the current specifications. This implies that traditional personal finance education, which primarily focuses on basic concepts, may be insufficient to improve student financial outcomes. Instead, we may need to incorporate education on behavioral factors such as awareness of overconfidence and how social interactions influence investing decisions. This is especially important given how much investing content spreads through peers and social media.

Author: Shams Sathin, Junior, University of Cincinnati

Paper: *The Geography of Intergenerational Poverty Revisited: How Urban and Rural Poverty Shape Life Chances*

Abstract: Research from the Opportunity Insights Project and other scholars established a causal link demonstrating that children growing up in poverty have worse outcomes as adults than those that do not grow up in high-poverty neighborhoods. Research to date has primarily focused on urban areas with high poverty rates. This study focuses on the differences between growing up in rural areas with high poverty and urban areas with high poverty levels. We find that, on average, children who grow up in rural high poverty have better outcomes than children who grow up in urban high poverty. We find that the differences in the association among poverty levels in urban and rural areas are largely explained by neighborhood characteristics such as the share of single parents or college graduates in the neighborhood. Finally, we find that geographic mobility increases life chances. Because the decision to move is endogenous, we use local labor market shocks as an instrument for the decision to stay in the same labor market as a child grew up in. We find that accounting for this endogeneity impacts the estimates for children who grow up in families at or below median household income.

Author: Hannah Kelly, Senior, The University of Akron

Paper: *Women's Work and Wealth: Measuring the Impact of Incremental Liberations, 1850-1870*

Abstract: This paper examines the impact of various property and labor rights laws on women's property and income growth as well as their rise in various occupations from 1850 to 1870.

Married women's property acts are predicted to positively influence labor force participation rates by providing greater economic autonomy. Using a two-way fixed effects difference-in-difference model, this project analyzes data from the IPUMS Full Count census for 1850, 1860, and 1870, encompassing 48 states. Four models assess the impact of property laws on women's real property holdings, labor force participation, household types, and real property values. By quantifying the impact of various legal reforms on women's economic empowerment, this project fills a gap in the

understanding of the intersection between law, society, and women's economic agency during a transformative period in pre-industrial American history.

Ultimately, my findings showed that none of these laws impacted women's real property values or overall labor force participation rates with statistical significance. Married women's property acts did have significant impacts on overall unemployment, lowering unemployment in states which passed the law. Sole trader laws, similarly, increased the number of women in trade professions in a statistically significant manner in states where the law was passed. States which passed married women's property acts were more likely to have women living in family households and less likely to live in non-family households. States which passed sole trader laws saw the opposite effects in household preferences. Earnings acts were not effective across any models.