# Abstracts of Papers Presented at the 2024 Annual Meeting

SESSION 1: TRADE COSTS

The Economic Consequences of Trade Protection: Evidence from the Smoot-Hawley Tariff Act

This paper examines the effect of tariff increases on regional economies after the passage of the Smoot-Hawley Tariff Act of 1930, which raised tariff rates on approximately one-third of all dutiable items. We construct a Bartik-style measure of the Average Tariff Changes (ATC) for each local labor market, measuring how exposed the labor market is to the tariff policy. By employing a continuous difference-in-differences strategy, we find local labor markets with a larger exposure to the tariff policy experienced a significant increase in the labor force participation rate. The effect is concentrated outside the South. Even though the Smooth-Hawley Tariff Act was initially proposed to help the struggling agricultural sector, we do not find evidence that the tariff policy significantly affected rural labor force participation, crop prices, the value of agricultural lands, or the use of agricultural machinery.

JIWON CHOI, Brandeis University, and Ahna Pearson, University of Michigan

Suez

For all of its importance in the historical literature and contemporary trade, we still lack a complete quantitative reckoning of the Suez canal's opening and subsequent operation. Using multiple sources of data, we find that Suez had an outsized role in shaping the first wave of globalization. Its introduction led to a roughly 50 percent increase in bilateral exports for treated country-pairs, an effect which persisted decades after its opening in 1869 and which suggests a roughly 10 percent increase in world trade due to Suez alone. We also identify changes in the composition of trade and explore the canal's role in amplifying the "Great Specialization." To understand mechanisms, we revisit shipping cost calculations related to the transition from sail to steam, showing that the canal's effects would have increased over time as more trade routes and more types of goods were affected in light of incremental improvements in steam technology.

David Jacks, *National University of Singapore*, Chris Meissner, *University of California, Davis*, and Nikolaus Wolf, *Humboldt-Universität zu Berlin* 

The Many Sources of Variation in Real Tariff Rates: The United States, 1914–1934

U.S. tariffs skyrocketed from below 20 percent in the early 1920s to almost 60 percent during the early 1930s. Recent research has leveraged variation in these tariffs across industries, but they have largely ignored enormous within-industry tariff variation

during the period. To explore this variation, we construct a balanced panel of 2,000 line-items from 1920–1934 to provide a number of insights. First, we use a tariff decomposition to demonstrate wide variation in nominal rigidities across industries. Second, we demonstrate that these nominally rigid tariffs were disproportionately levied on intermediate inputs. Third, we derive a mechanical relationship between the average and standard deviation of tariffs, such that the industries with the highest level of tariffs also experienced the largest variation across goods. Fourth, we explore the possibility that these rigidities were politically motivated as a sort of endogenous tariff, thereby protecting domestic industries precisely when the price of goods decline.

James Harrison, *United States Naval Academy*, and Mario Crucini, *Purdue University* 

#### SESSION 2: INSTITUTIONS AND LABOR MARKETS

The Influence of Sectoral Minimum Wages on School Enrollment and Educational Choices: Evidence from Italy in the 1960s–1980s

Do minimum wages influence school enrollment and educational choices? This paper studies the effect of sectorally-bargained minimum wages using a quasi-natural historical experiment from Italy around 1969, when labour unions obtained steep wage raises for manufacturing workers. Italy's weakly-selective educational system, whereby students choose specialist educational curricula at age fourteen, allows to separately identify the impact on enrollment from that on educational choices. Absent microdata for the period under study, I present original estimates of education and labour-market variables at the province level with annual frequency between 1962 and 1982. Exploiting exogenous spatial variation in the intensity of the minimum wage hike between provinces with an instrumental variable approach and flexible Difference-in-Differences, I find a temporary increase in early school leaving and a permanent substitution away from vocational schools preparing for manufacturing jobs. The length of the adjustment explains a significant long-term loss in Italy's human capital stock.

Andrea Ramazzotti, CSEF, University of Naples Federico II

Did Organized Labor Induce Labor? Unionization and the American Baby Boom

The fundamental causes of the American Baby Boom are not well-understood. In particular, standard theories fail to predict its timing. I shed new light on the origins of the Baby Boom by exploring a new channel: the effect of labor union membership on fertility. Union membership rates more than tripled following the passage of the Wagner Act in 1935, and by the peak of the Baby Boom one-third of American workers were union members. I construct novel estimates of union membership at the county-level and exploit variation across areas in responsiveness to the Wagner Act to test whether the economic gains from unionization drove fertility increases during this period. I find that increases in union density are associated with increases in birth rates and, ultimately, completed fertility. Effects are robust to controlling for a large battery of time-varying confounders at the local level.

Ingraining Traditional Gender Roles in the Classroom: Evidence from the Spanish Social Service

We use an event-study framework to examine the long-run effects of conservative education on women's family and labor decisions. In 1939, the Spanish dictatorship created the Social Service, a 6-month education program to persuade women to become mothers and housewives. We exploit the discontinuity induced by the sudden abolition of the program and variation in the age of enrollment to examine the consequences of attending. Using historical enrollment records and birth and marriage certificates, we find that the Social Service successfully instilled the regime's ideology. Women exposed to the class got married and had kids at younger ages, consistent with the desire to form a family sooner. In addition, they are more likely to become housewives when their first child is born. Consistent with a mechanism of increased religiosity and conservative values, attendees are less likely to have non-catholic weddings and more likely to be affiliated with the conservative party.

Alejandro Martínez-Marquina, University of Southern California

#### SECTION 3: STATE BUILDING AND REFORM

Crisis, State Capacity and the Making of Autocracy: Evidence from the Thirty Years' War

This study documents the emergence of capable autocracies in response to war. We trace how the Thirty Years' War (1618–48), Europe's largest conflict before World War I, led to the consolidation of ex ante weak states at the expense of parliaments. Local troop upkeep necessitated the integration of towns into the central state, hence increasing ruler capacity. We identify planned troop movements in secret military communications to estimate this fiscal-military expansion and the dismantling of parliaments it enabled. Places with a high capacity for collective action resisted autocratization. Elsewhere, absolutist regimes became entrenched for centuries and further repressed local democratic institutions. Our findings shed light on the expansion of states in the face of crisis, highlighting a potential trade-off between the short- and long-run optimality of governance structures.

Matthias Weigand, *Harvard University*, and Luis Bosshart, *London School of Economics* 

Nation-Building and Mass Migration: Evidence from Mandatory Palestine

This paper focuses on the grassroots of nation-building in times of mass migration. We identify the key factors explaining the rise of societal leaders from the scattered, heterogeneous Jewish communities of Mandatory Palestine between 1920 and 1948. Our empirical strategy relies on a new "frontier expansion" algorithm to predict the dynamics of Jewish settlement creation, which we combine with migrant characteristics in a shift-share design to isolate exogenous variation in the local composition of settlers across locations. We find that: (i) leaders that were instrumental to nation-building in the early state of Israel were more likely to come from diverse communities; (ii) these

diverse communities experienced fewer Arab civilian casualties during the first Arab-Israeli War; and (iii) these effects are confined to Kibbutzim, i.e., integrated settlements with communal lifestyle.

Laura Panza, *University of Melbourne*, and Yanos Zylberberg, *University of Bristol* 

Reassessing China's Rural Reforms: The View from Outer Space

We study one of the central reforms in China's economic miracle, the Household Responsibility System (HRS), which decollectivized agriculture starting in 1978. The HRS is commonly seen as having significantly boosted agricultural productivity, but this conclusion rests on unreliable official data. We use historical satellite imagery to generate new measurements of grain yield, independent of official Chinese statistics. Using two separate empirical designs that exploit the staggered rollout of the HRS across provinces and counties, we find no causal evidence that areas that adopted the HRS sooner experienced faster grain yield growth. These results challenge our conventional understanding of decollectivization, land reform, and the origins of the Chinese miracle.

OLIVER KIM, *University of California, Berkeley*, and JOEL FERGUSON, *University of California, Berkeley* 

# SESSION 4: FINANCIAL AND MACRO STABILITY

CEO Ownership, Risk Management, and Bank Runs at Unlimited Liability Banks during the 1890s

Using unique data on California state banks that were subject to unlimited liability, we study the relationship between president (CEO) liability and risk management, and bank runs during the panic of 1893. At the time, bank presidents were required to hold stocks that had features resembling both the restricted stock and clawback of today to advance long-termism and discourage risk-taking. We find that the banks with large president ownership and liability held more equity capital and less risky loans, so they were less likely to experience bank runs and failures. Our study implies that regulatory policies on bank executives affect the methods of risk management and reduce the default risk of banks.

Jennifer Rhee, Federal Deposit Insurance Corporation, Haelim Anderson, Bank Policy Institute, and Jaewon Choi, University of Illinois, Urbana-Champaign

Who Collaborates with the Soviets? Financial Distress and Technology Transfer during the Great Depression

We provide evidence that financial distress induces firms to sell their technology to foreign competitors. To do so, we construct a novel, spatial panel dataset that locates U.S. firms who signed Technology Transfer Agreements (TTAs) with the Soviet Union during the 1920s and 1930s in various U.S. counties. By relating the number of TTAs

signed in each county to the number of bank failures, we establish a significant, positive relationship between financial distress and the number of firms signing TTAs with the Soviet Union. This suggests a novel potential cost of banking panics when the customers of a failed bank include firms with valuable proprietary technology: financial distress induced by bank failures makes it easier for foreign governments to acquire valuable domestic technology.

JACOB WEBER, Federal Reserve Bank of New York, and JERRY JIANG, University of California, Berkeley

Monetary versus Macroprudential Policies: Causal Impacts of Interest Rates and Credit Controls in the Era of the U.K. Radcliffe Report

We have entered a world of conjoined monetary and macroprudential policies. But can they function smoothly in tandem, and with what effects? Since this policy cocktail has not been seen for decades, the empirical evidence is quite limited. One way to fix this shortcoming is in a historical laboratory. The Radcliffe Report (1959) set the United Kingdom on a three-decade experiment of using credit policy tools alongside conventional interest rate policy. These non-price tools are similar to policies now being considered or used by macroprudential policymakers. We describe these tools, document how they were used, and craft a new, largely hand-collected data set to estimate their effects. Using a novel empirical strategy, we find that monetary policy innovations acted on output and inflation broadly in line with consensus views today, but tighter credit policy acted primarily to modulate bank lending with lesser effects on output and inflation.

ALAN M. TAYLOR, Columbia University, DAVID AIKMAN, King's College London, and OLIVER BUSH, Bank of England and London School of Economics

SESSION 5: RACE IN THE U.S.

Political Foundations of Racial Violence in the Post-Reconstruction South

This paper shows how the geography of racial violence across the post-Reconstruction U.S. South was tied to the local political performance of the Democratic Party. Analyzing close elections using a regression discontinuity design, we find that Southern counties where Democrats lost in presidential elections between 1880 and 1900 were nearly twice as likely to experience Black lynchings over the subsequent four years. Indicating elite influence, Democratic losses simultaneously precipitated a rise in Black crime allegations in local Democrat-affiliated newspapers. An early substitute for later de jure voter suppression, such violence played a critical role in the Democratic Party's consolidation of the South, together with the political and economic disenfranchisement of Southern Black people in the early twentieth century. To help interpret these findings, we develop a formal theory in which electoral losses signal local political weakness, rendering more salient the threat of minority opposition and inducing greater investment in violence by local elites.

Patrick Testa, *Tulane University*, and Jhacova Williams, *American University* 

The Impact of Federal Housing Policies on Racial Inequality: The Case of the Federal Housing Administration

The Federal Housing Administration began insuring residential mortgages in 1935 and is credited with expanding home-ownership among American households, while discriminating against African-Americans through redlining. This paper estimates the effect of the FHA's mortgage insurance program on racial disparities in housing between 1930 and 1940. For causal leverage, I use the distance between each county and the FHA office with jurisdiction over its residents. I find a negligible effect of the program on racial disparities in homeownership, but an expansionary effect on the racial gap in home values. Using linked census data, I find suggestive evidence that white (but not black) households were more likely to leave central cities for suburbs in counties where the FHA was more active, home values of suburban (city) homes were relatively higher (lower) by 1940, and home-ownership rates were higher among white households in the suburbs, and black households who remained in cities.

OMER ALI, University of Pittsburgh

The Effect of Wealth on Descendants of the Enslaved

Can temporary wealth transfers narrow racial wealth disparities? Can they address other racial inequalities? In this project, I leverage quasi-random oil discoveries on Black-owned land in the early 1900s to study how large positive wealth shocks may have affected Black economic progress in the short and long-term. I find that wealth transfers have positive effects in the very short term: landholders who find oil may be more geographically mobile, have higher status occupations and invest more in children's human capital. Work on longer-term outcomes is in progress.

MICAH VILLARREAL, University of California, Santa Barbara

SESSION 6: SCIENCE, KNOWLEDGE DIFFUSION, AND DEVELOPMENT

Early Modern Academies, Universities and Growth

Using a novel micro-level database spanning Early Modern scholars and educational institutions, I explore the impact of innovative knowledge on Europe's economic growth from 1500 to 1800. Employing advanced DID estimators, I observe that the establishment of scientific academies leads to a 15 percent increase in population growth rates after 150 years in the cities hosting them. However, literary academies show no discernible positive effect on long-term growth. I also do not find any detectable effect in the entire sample of academies, suggesting the importance of micro level data on scholars' field of study. Moreover, I test the historical evidence about academies fostering universities' reforms and innovations by showing that scientific academies rapidly enhance the quality of universities in the same urban area. Overall, the paper provides the first evidence on the pivotal role of scientific academies in the economic growth of Europe and in the modernization of universities.

Codification and Technology Absorption: Evidence from Trade Patterns

Meiji Japan was the only non-Western country to successfully industrialize during the first wave of globalization. Using several novel datasets, we show that Japan's unique industrial development during this period was driven by government investments in acquiring "technical literacy." We find that Japanese industry level productivity growth is associated with how much an industry could benefit from adopting British Industrial Revolution technologies, but only after the government provided the public goods (dictionaries, and translations of foreign technical manuals) necessary to develop technical literacy in Japanese. Indeed, until 1885, Japan looked remarkably similar to the rest of the global periphery in which there was no relationship between how much an industry could benefit from adopting British Industrial Revolution technologies and the industry's productivity growth rate. These results suggest that the development of technical literacy was an essential component of the Industrial Revolution in Europe, and that its spread often required state investments in developing domestic technical literacy.

Réka Juhász, *University of British Columbia*, Shogo Sakabe, *Ludwig Maximilian University of Munich*, and David Weinstein, *Columbia University* 

Industrial Revolution Uncensored: Institutional Change and Useful Human Capital in the Wake of the 1848 Revolution

Exploiting the 1848 revolution in the Habsburg Empire, I study how a sudden institutional change impacts economic development. In contrast to much existing research, which focuses on the rule of law and the security of property rights, I argue that the main impact occurred through the expansion of the upper-tail useful human capital (Mokyr 2005) following the revolution. While the revolution was defeated, important liberalizing reforms persisted in the areas of (i) the press, (ii) technical education and (iii) knowledge-promoting voluntary associations—the information space, for short. Pushing back against the existing consensus that the revolution had no discernible impact on the empire's economic development, I combine newly collected data on the pre-1848 and post-1848 information space with data on the use and location of steam engines in 1841–1863 to establish the causal link between the post-1848 reforms and the diffusion of this important industrial technology.

Tomas Cyrcek, University College London

## SESSION 7: EMPIRES AND THEIR EFFECTS

Rise and Fall of Empires in the Industrial Era: A Story of Shifting Comparative Advantages

The last two centuries witnessed the rise and fall of modern empires. We construct a model which rationalises this in terms of the changing trade gains from empires. In the model, empires are arrangements that reduce the cost of trade between an industrial metropole and the agricultural periphery. During early industrialisation, the value of such bilateral trade increases, and so does the value of empires. As industrialisation

diffuses and differentiation within manufactures increases, trade becomes more multilateral and intra-industry, reducing the value of empires. Our results are consistent with long-term changes in the number of sovereign entities, international income distribution and trade patterns, as well as with qualitative arguments about these changes previously made by historians and policy makers.

KEREM COSAR, University of Virginia, and ROBERTO BONFATTI, University of Padova

Who Governed Colonial Africa? Taxation and Representation in the British Empire

Who really held power in colonial Africa? Colonial governments made policies which have had lasting impacts on the continent's development. But they were constrained in many ways—by lack of staff and resources, and by their lack of legitimacy with those they ruled. Recent research in political science has shown that the survival of autocratic regimes in contemporary African countries has depended on strategies of power sharing and patronage. Similarly, British colonial governments used strategies of power sharing and resource distribution at various administrative levels to secure the stability of colonial rule. This paper uses new data on the composition of colonial legislative councils and local government finances to show how these methods varied between and within colonies, reflecting local economic and political circumstances.

Leigh Gardner, London School of Economics

# SESSION 8: POLITICAL ECONOMY

Lobbying for Industrialization: Theory and Evidence

This paper develops a model of lobbying for industrialization and tests its predictions against the data on public petitions to the British Parliament and the U.S. Congress in the eighteenth—nineteenth centuries. Our theory integrates lobbying over industrial policies into the standard two-sector model of structural change and predicts that the intensity of lobbying displays a hump-shaped dynamics in the course of structural change. We find support for this prediction in the data on industrialization-related petitions in Britain and USA. Moreover, the model predicts that places with historically more concentrated capital ownership lobby for industrialization more actively and overcome status-quo earlier. The concentration of landownership, however, limits progressive lobbying. We document this empirically linking the U.S. petitions to manufacturing censuses of the nineteenth century. Finally, we calibrate our model to the British economy, and quantitatively match the joint dynamics of structural change, inequality, and lobbying for industrialization.

ALEXANDER YARKIN, Brown University and LISER, Luxembourg, and Dmitry Veselov, Higher School of Economics, Moscow

Losing the Country: Debt, Deflation, and the Rural Rise of the Nazi Party

In this paper, we study how the combination of a trade shock and an economic crisis triggered the rise of the NSDAP in rural parts of Weimar Germany. We show first how

increasing import competition after 1925, due to exogenous productivity increases in the Americas, drove up debt levels of German farmers and frustration with the democratic political system. Second, the price declines during the Great Depression caused Fisherian debt deflation, thereby making the debt burden unsustainable and leading to foreclosures. While traditional agricultural interest parties lost the loyalty of their constituents, the NSDAP gained support in areas more affected by this economic deprivation. Overall, this study provides the first causal evidence of an economic channel for the rise of the NSDAP in the countryside, where the party consistently received more than 50 percent of its votes.

Monique Reiske, *Humboldt-Universität zu Berlin*, Thilo Albers, *Humboldt-Universität zu Berlin*, and Felix Kersting, *Humboldt-Universität zu Berlin* 

From Couch to Poll: Media Content and the Value of Local Information

We document the importance of local information for the political engagement of citizens and accountability of politicians. Isolating the role of content is difficult because a would-be voter's choice of media type and content reflect non-random decisions. Canadian television provides a unique opportunity to overcome this challenge: until 1958, policy prioritized expanding network coverage by inhibiting competition in television markets—Canadians received public or private television content, but never both, allowing us to separate the impact of media content within a single media type. We find that television reduces voter turnout, but the effect is exclusive to public television districts, where informational content is national in scope. Whereas private television content is distinctly local, and its political relevance elicits engagement of citizens and accountability of politicians. We show that politicians speak and act on behalf of their constituents in Parliament because of the local relevance of private television content.

Andrew Dickens, *Brock University*, and Mathias Bühler, *Ludwig Maximilian University of Munich* 

# SESSION 9: THE EFFECTS OF TRANSPORTATION NETWORKS

Displacement and Infrastructure Provision: Evidence from the Interstate Highway System

This paper studies highway placement in the U.S. and its impacts on communities and individuals. Utilizing cross-sectional variation between neighborhoods in 1950, the last census preceding the 1956 Federal-Aid Highway Act, I show that tracts with a larger proportion of the city's Black population are more likely to house a highway, even after accounting for socio-demographic and geographical characteristics of the tract. Highway construction alters neighborhood dynamics, as evidenced by an event study for consistent tract definition from 1930 to 2020. Construction leads to a total population decline, primarily due to a reduced Black population increase. Highway construction negatively impacts individuals displaced or residing next to future developments. By geocoding the 1940 census and linking it to administrative mortality records, I find

that displaced individuals die younger and in neighborhoods with worse economic indicators. Those living next to a future development are also negatively affected.

Pablo Valenzuela-Casasempere, University of British Columbia

The Erie Canal and the Economic Transformation of Nineteenth-Century New York State

This paper presents the first causal estimates of the impact of canals on sectoral transition and long-term growth in nineteenth-century New York State. Using a difference-in-differences approach, I compare the outcomes in towns located close to the canal relative to those that were not close to the canal, before and after its opening. In an alternative identification strategy, I construct a least-cost path connecting targeted towns as an instrument for the actual canal route. I find that towns located close to the canal experienced faster population growth and a higher level of sectoral transition from agriculture to manufacturing and commerce. I argue that the mechanism was the development of small-scale manufacturing and the expansion of commercial activities brought about by lower transportation costs and easier access to distant markets. My findings also indicate the extent of the canal's impact is 15 to 20 km.

Youwei Xing, Clemson University

Derailing Fortunes: Market Integration and Labor Reallocation in Industrializing Britain

We investigate two determinants of firm exits: technological change and market integration. Contrary to previous studies, we argue that these two factors should not be considered separately: their interaction spurs firms' exit even more. To test this hypothesis, we introduce a new dataset on individual bankruptcies at the location-sector-year level in late nineteenth-century Britain, which we combine with rich micro-level census data. In this period, we investigate the effect of the British railway expansion on firm exits and employment changes. We find that the manufacturing sector—the one with most heterogeneous firms—experienced an increase in job creation and in firms' exits following the arrival of the rail. Accordingly, technological change and market integration work together to explain firms' failure and within-sector reallocation.

Tobias Korn, *Leibniz University Hannover*, and Jean Lacroix, *University Paris Saclay* 

## SESSION 10: EGG TIMER SESSION - EDUCATION AND LABOR

Domestic Technology and Human Capital Formation: Rural Electrification and Secondary School Enrollments in Ireland

Between 1947 and 1966, Ireland's Rural Electrification Scheme began providing electricity to three quarters of all rural dwellings. This provided households an important means of improving productivity and changing time use patterns. We ask whether households began to invest more in human capital formation for children, particularly girls. Combining newly digitised data on (secondary) school-level enrolments for boys

and girls and electrification maps provides a longitudinal dataset covering 15 of the years between 1947–1966. 2SLS panel regression methods test whether the arrival of electrification in an area led to higher participation in secondary education as a share of the population. We address endogeneity in the electrification process using instrumental variables based on a Terrain Ruggedness Index interacted with a time trend. We find large and statistically significant positive effects of electrification on secondary school participation for boys, however the effect on girls' enrolments is weaker and less robust.

Seán Lyons, University College Dublin, Míde Griffin, Trinity College Dublin, and Anne Nolan, Economic and Social Research Institute. Dublin

Friends or Rivals? Social Capital and Intergenerational Mobility in Colonial India

What is the effect of social capital on intergenerational mobility? In this paper, I study the effect of social ties with upper-caste peers on the probability of a non-elite caste high school graduate passing university examinations or becoming a lawyer. For this purpose, I digitize and use records of over 37000 high school graduates from 276 high schools across 5 colonial Indian provinces between 1894 and 1919. Using possibly random variation in the share of upper-caste peers across cohorts within the same high school, I show that having a higher share of upper-caste peers has heterogeneous effects, with the effect negative for non-elite caste students, compared to their upper-caste peers. Specifically, non-elite caste students with more upper-caste peers in their cohort are less likely to graduate from university or become lawyers compared to their upper-caste peers. Results are driven by the negative effects on the outcomes of merchant caste students.

Cyril Thomson, University of Padova

The Effects of PhD Programs on Innovation

This paper estimates the effect of PhD programs on innovation using two novel datasets at the aggregate and individual level by leveraging the introduction of doctoral degrees in Italy in 1983. At the aggregate level, I exploit the staggered opening of PhD programs across Italian provinces in a staggered Difference-in-Difference (DiD) design. Thanks to the centralised allocation of PhD programs across universities, I identify a suitable control group. I find a permanent increase in local patent production of 28 percent to 46 percent in provinces that opened a PhD program. Using individual level data and PhD entry exam marks, I run a Regression Discontinuity (RD) analysis to estimate the causal effects of completing a PhD at the individual level. The results show PhD graduation increases individuals' probability of becoming an inventor by 8 times and increases their total patent production by 10 times.

Manfredi Aliberti, RED - Rome Economics Doctorate

The Influence of Adult Neighbors on Children's Future Occupation Choice

How important are adult role models in influencing children's career choice? We exploit a unique feature of historical censuses—that they were collected by enumerators

going door-to-door, and so by examining the ordering of households on census manuscript pages we can reconstruct the microgeography of a neighborhood—along with advances in cross-census record linkage, to document the importance of neighbors' occupations in 1910 on children's occupations in 1940. The identifying assumption is that, while households may sort into neighborhoods, they are unable to select their next-door neighbors on the basis of occupation. Children are about 5 percent more likely to choose the occupation of their next-door neighbor than are children on the same street who live further away. The effect is even stronger for high income occupations. We additionally explore heterogeneity by type of occupation, neighborhood characteristics, and type of exposure.

MICHAEL Andrews, University of Maryland Baltimore County,
RYAN HILL, Northwestern University,
Joseph Price, Brigham Young University,
and RILEY WILSON, Brigham Young University

Education and Local Markets for (Child) Labor: Evidence from the Development of the U.S. South

I study the adoption of compulsory schooling laws in the U.S. South. By combining a novel dataset of county-level compulsory schooling laws from 1900–1940 with the full-count U.S. Census, I estimate the effects of exposure to required-schooling laws for southern-born workers in 1940. Direct exposure to compulsory schooling increases years of schooling, while indirect exposure from neighboring counties leads to fewer years of schooling. Patterns of heterogeneity in the indirect effect suggest it is driven by infra-marginal students dropping-out after in response to higher wages. Policymakers thus face a trade-off when child labor is common: increasing enrollment in one market undermines enrollment in another by raising the outside-option wage. Furthermore, although both whites and blacks benefited from direct exposure to required-schooling, white workers did so by earning higher wages in the service-sector jobs of highly productive markets, while black workers left the wage-earning system entirely to become farmers and entrepreneurs.

James Landin Smith, University of California, Berkeley

Climate Adaptation, Women's Work, and the Demographic Transition in France: 1851–1911

How climate change is likely to influence the economic incentives around fertility decisions has recently attracted academic attention. Although there is a wealth of studies that try to empirically identify the factors that influence fertility, none have empirically assessed the role of climate adaptation in fertility decisions. Using a theoretical model, I argue that higher summer temperatures caused farmers to switch away from pasture farming. This reduced demand for female labour in the agricultural sector. Because of the reduced opportunity cost on women's time to raise children, fertility rose. Using a panel analysis covering 81 French départements from 1851 to 1911, I find that higher temperatures had a positive, significant, and robust effect on fertility. I also find that higher summer temperatures, by damaging pasture production, are associated with a switch away from pasture farming and a lower female to male agricultural wage ratio.

Higher summer temperatures thus slowed down the demographic transition by reducing employment for female labourers.

Eoin Dignam, London School of Economics

# SESSION 11: EGG TIMER SESSION - IN TWO PARTS

-Part A: Chinese History

Salt Trafficking and Violent Human Capital

This paper studies how civilians developed violence capacity and propensity in response to Qing China's centralized control over the salt industry. The salt tax was an iniquitous institution that sold exclusive rights to salt merchants and granted them monopoly status in each local market, resulting in high salt prices. To facilitate management, China was divided into 11 salt districts, and the price parity across district borders can be twice as high. The higher the price parity, the larger the incentive to smuggle salt, and repeated violence between the state and traffickers will follow. We use an RD approach to identify government-inflicted violence, quantified by checkpoints established and crackdowns reported, and the civilian violence level in response, measured by degree holders in military exams divided by those in civilian exams.

YILING ZHAO, Peking University, MIAO MENG, Renmin University, and ZHANG LEI, Renmin University

International Clan Linkage and Small and Medium-Sized Enterprises in Coastal China, 1978–2000

This article focuses on economic takeoff of post-1978 China by studying the success of SMEs in coastal provinces from a global view. During 1850–1950, lineages in regions with strong kinship culture pooled survival risk by sending members overseas and constructing long-term links. Such international links played a significant role as marketization reform was triggered in 1978. Overseas lineage members invested in home counties because of low information cost and high contract enforcement, accounting for the geographical concentration of SMEs in specific counties along Southeastern coast. This article constructs a dataset of 200+ counties in coastal provinces and collects relevant data. To overcome endogeneity, it develops causal identification strategies (DID and IV). It finds that the stronger international kinship linkage in history was associated with more FDIs, more SMEs, and their better performance after 1978. It offers a path to understanding the economic takeoff of developing economies from a global perspective.

HANZHI DENG, Fudan University

—PART B: INTERNATIONAL FINANCE AND TRADE

Reaffirming the Wheat Boom: New Evidence for Structural Breaks in Canadian Economic Growth

In the last years of the nineteenth century, Canada experienced a "wheat boom." Since the 1960s, historians and economists have debated whether the boom meaningfully accelerated economic growth. A resolution has been elusive notably because of issues of data quality regarding growth in the decades before the boom and the assumptions of the counterfactual scenarios drawn to evaluate the causal effect of the boom. We use newly corrected national output data alongside previously unavailable econometric tests such as synthetic control methods to break the deadlock. We find that there was indeed a structural break in growth in the late nineteenth century. We also are able to state that this break was unique to Canada and that it explains 36 percent to 40 percent of the growth observed during the period—an estimate that is closer to the most optimistic ones in the literature.

VINCENT GELOSO, George Mason University, CASEY PENDER, Carleton University, and JAMIE PAVLIK, Texas Tech University

Central Banks and the Absorption of International Shocks, 1890-2021

We examine how central bank balance sheets react to international financial shocks and assess whether they can protect domestic financial markets from these shocks. Analysing newly collected monthly data from 22 central banks since 1890, we find: First, contrary to conventional wisdom, central banks do not only rely on forex intervention to tame international shocks, but systematically buy domestic assets to stabilize the money market rate. Using the balance sheet to relax the constraints of fixed exchange rates has been the norm in a long term perspective. Second, until the 1970s, the macroeconomic trilemma prevailed: balance sheets did not need to respond in the context of floating exchange rates or closed capital accounts. Third, the second financial globalization since the 1990s has created a novel situation in which balance sheets today are called upon to absorb international shocks even under floating exchange rates. Central banks today are more important than ever.

Matthias Morys, *University of York*, Éric Monnet, *Paris School of Economics*, and Guillaume Bazot, *University of Paris VIII* 

On Tariffs: An Analytical Framework

This paper seeks to pull together the various threads and discussions of tariffs in economic history into a single analytical framework creating both temporal and conceptual parameters for understanding the history of tariffs to facilitate a better understanding of tariffs and their consequences for local and global economies. Tariffs, in most cases, have been implemented for three main reasons: revenue-raising, national protectionism, or deterrence (i.e., de facto prohibition). The paper will define the various components and concepts that factor (or ought to factor) into the analysis of tariffs in historical context. It will then apply a schema that will chronologically segment the use of tariffs from the early modern period to today showing how the use of tariffs have evolved. Ultimately, the paper shows how the prevalence or absence of smuggling can be used as a key indicator in determining the success or failure of tariffs in most situations.

#### SESSION 12: EGG TIMER SESSION - THOUSAND FLOWERS

Rags to Rags: The Effects of the New Poor Law across Three Generations

We study the intergenerational impacts of cash transfers using the 1834 "New" Poor Law, which drastically cut the income support that had been provided to 15 percent of the population in England and Wales and cost 2 percent of GDP. We show that in 1861, cohorts more exposed to income-support declines in childhood held lower-skilled jobs as adults and had fewer of their children in school. Linking these sons to the 1901 census, we find the same results for them as adults and for their children, highlighting the importance of accounting for multigenerational effects in cost-benefit analyses of social programs.

JON DENTON-SCHNEIDER, Clark University, and JENNIFER MAYO, University of Missouri

Top Earners and the Great Compression: New Estimates Based on Tax Records

This paper presents new estimates of wage inequality in the United States from 1918 to 1949. Building upon a new top-income methodology, we provide various definitions of top wage groups that account for the sharp fluctuations in the employed population during this period. The results confirm the decline in wage inequality during the Second World War, primarily due to the relative stagnation of the top 1 percent group and a sharp increase at the bottom. However, the underperformance of top wage earners was driven by a significant compositional shift that resulted from an unprecedented rise in the corporate tax. This change prompted a shift in business preferences regarding their legal status, fostering a surge in partnerships during the 1940s. Consequently, a significant number of workers transitioned from salaried positions to self-employment, which amplified the compression observed in the wage distribution.

Víctor M. Gómez Blanco, *University of Valencia*, and Miguel Artola Blanco, *Carlos III University of Madrid* 

Practical Use of Deep Learning and Generative AI in Data Extraction from Large Historical Archives: The Example of U.S. Census 1950

This study, in collaboration with the Minnesota Population Center, addresses the challenge of the 1950 U.S. Census data's overcount of approximately two million individuals, attributed to misinterpretations of handwritten texts. It focuses on common transcription errors, such as confusing "No One" for "Noah" and "Vacant" for "Vincent" which significantly impact data accuracy. To resolve these issues, deep learning algorithms are utilized to detect and correct inaccuracies, targeting key visual indicators of invalid data. This approach has achieved an impressive 95 percent accuracy rate, demonstrating the effectiveness of deep learning tools in adapting to diverse patterns. Additionally, the paper explores the use of generative AI for linking complex individual names across various documents, through algorithms that recognize and associate different name representations, including those with complex suffixes and prefixes. This method greatly enhances the ability to track and analyze

data across multiple historical records, achieving a notable accuracy rate of around 91 percent.

MENGYUE ZHAO, University of Oxford

Retaining Population with Water? Irrigation Policies and Depopulation in Spain Over the Long Term

Depopulation, especially, but not only, rural, has become a major concern across many countries. As one type of place-based policy, irrigation has been claimed to contribute to resettling populations and reducing outward migration, by increasing agricultural output, productivity, and competitiveness and, consequently, employment and living standards. This paper aims to elucidate on the relationship between irrigation and population for Spain, historically and currently the most irrigated country and one of the most depopulated countries in Europe. We use municipal-level data over the period 1910–2011 and exploit a staggered difference-in-differences design. Overall, we find an effect on population only for irrigation developments that started in the relatively distant past. In any case, effects are temporary or tend to level off. We also consider trade-offs. We discuss the policy implications of the findings in light of current policies, and in terms of environmental and economic costs of increasing the intensity of irrigation.

Javier Silvestre, Universidad de Zaragoza, Ignacio Cazcarro, Universidad de Zaragoza, Miguel Martín-Retortillo, Universidad de Alcalá de Henares, Madrid, Ana Serrano, Universidad de Zaragoza, and Guillermo Rodríguez López, Universidad de Zaragoza

# Prisons and Homophobia

Inmates' informal code often ascribes low status to persons perceived as passive homosexuals. We investigate whether prisons contribute to homophobia in the general population using an exogenous shock of the Soviet amnesty of 1953, which released 1.2 million prisoners. We document the spread of prison norms in localities exposed to the released ex-prisoners. In the long run, we find effects on anti-LGBTQ+ hate crimes, homophobic slurs on social media, and discriminatory attitudes. Using contemporary longitudinal data from Australia, we show that prison experience prompts a higher level of anti-gay sentiments among males and their families, while no discernible difference exists before incarceration.

MICHAEL POYKER, *University of Texas at Austin*, and MAXIM ANANYEV, *University of Melbourne* 

#### SESSION 13: GENDER, OCCUPATION AND TECHNOLOGICAL CHANGE

Were Breadwinners Male? Impact of Technological Advancement and Industrialization on Labor Market Gender Gaps in Antebellum America

This study investigates how early industrialization affects the labor market gender gaps in Antebellum America. Employing historical canal connectivity as proxy of

technological advancement, the study implements a Triple-Differences model to examine factors that affect the division of labor between men and women during the transition of the American economy from agriculture to industry. Empirical results reveal a significant influence of child-rearing responsibilities on the gender gap in labor force participation, when comparing early industrialized regions to late-industrialized ones—the gender gap in labor force participation was found to widen for parents and narrow for non-parents. In addition, an analysis of the 1860 Census of Manufacturing shows that in establishments where steam power was adopted, male workers earned higher wages than their counterparts in non-steam environments, while female workers earned less. Namely, technological advancements lower the opportunity cost for women to stay at home and raising it for men.

JINYAN CHANG, Miami University

The Gender Division of Labor and Structural Transformation: Industrializing Japan

Gender differences in labor opportunities can accentuate urban-rural wage gaps if laborers are married and must comove. In the case of industrializing Japan, 1890–1929, men had higher wages in cities while women had higher wages on farms leading to mixed incentives within households. We study the effects of this on urban-rural migration using the silk boom, 1916–1919. The silk boom benefited women because they produced silk cocoons, an input for silk. We use large variation in local silk cocoon prices, due to its perishability, and an IV identification strategy to show areas with higher silk cocoon prices experienced lower outmigration among both men and women. The oversupply of male labor also led to a relative decline in male wages, but they remained on farms to maximize household incomes. These findings show that large differences in labor opportunities across gender can slow down structural transformation and industrialization.

Yuzuru Kumon, Norwegian School of Economics, and Erika Igarashi, Hitotsubashi University

Engine of Intergenerational Mobility: Typewriter Adoption and Women's Economic Outcomes

This paper studies the effects of the invention and diffusion of the typewriter in the United States on Black and White women's outcomes. Exploiting variation in the demand for typists across industries coupled with the geographic distribution of industries, I document that typewriter adoption caused an increase in women's labor participation and a decrease in their likelihood of being married and having children. These developments operated through two channels: a direct effect driving White women to leave the household and enter offices, and an indirect crowding-in effect that increased the participation of Black women, who substituted for White women by entering domestic service work. Using linked Census data following women over time, I show that typists were more likely to marry men of higher income compared to their non-typist sisters. This is consistent with typing offering women a unique opportunity to work in offices alongside higher-earning men.

## SESSION 14: INTERNAL AND EXTERNAL MIGRATION

Time to Accumulate: The Great Migration and the Rise of the American South

Countries undergo structural change as a crucial development process. Focusing on the Second Great Migration period (1940–1970), this paper proposes capital accumulation and factor-augmenting technological changes as additional mechanisms for structural change and economic development of the American South. I find the beneficial role of out-migration in breaking labor-intensive practices in the labor-abundant economy. The main empirical strategy utilizes a shift-share instrumental variable strategy that combines predetermined migrant networks with pull factors of receiving cities. I find that the flexible sector (agriculture) in more out-migrated counties released labor, while the inflexible sector (manufacturing) absorbed labor, compared to less out-migrated counties in the same state. Physical capital increased in both agriculture (substitution effect) and manufacturing (complement effect). I develop and calibrate a dynamic spatial general equilibrium model that rationalizes the reduced form findings. Counterfactual analyses highlight the benefits of rural out-migration on the local economy through capital deepening and structural change.

Dongkyu Yang, University of Colorado, Boulder

The First Transatlantic Mass Migration: Spain 1492–1540

We study the patterns of the first transatlantic mass migration, from Spain to the Americas (1492–1540). In a novel dataset that builds on previous compilations which are augmented by new widescale archival work, we combine individual-level migration records containing demographic information of tens of thousands of early Spanish migrants with sixteenth-century municipality-level information on more than 8,000 places. Mapping the evolution of the geographic sources of the early Spanish migration, we find three main patterns: A gradient in which the rates of emigration increased with proximity to the port of embarkation, Sevilla; a west-east gradient, where the eastern provinces of Spain are largely absent from this movement; and a number of emigration hostpots in provinces farther from Sevilla. Our empirical analysis supports the view that the evolution of the Spanish migration was shaped by overland transportation costs and by the prominence of social networks.

Yannay Spitzer, *The Hebrew University of Jerusalem*, Leticia Arroyo Abad, *CUNY*, *Queens College*, José-Antonio Espín-Sánchez, *Yale University*, and Ariell Zimran, *Vanderbilt University* 

A Taxing Journey: Tax Adoptions and Interstate Migration in the Early Twentieth Century

This paper examines the relationship between sequential income tax adoptions and interstate migration in U.S. states between 1900 and 1930. Building on a migration gravity model with multilateral resistance, we analyze matched full-count U.S. census

data to explore the causal link between state income tax introductions and migration. Our findings indicate that the adoption of personal state income taxes lead to an 8.7 percent increase and corporate state income taxes lead to an 11.3 percent increase in internal migration. We conclude that income tax adoptions had substantial implications for interstate migration during this period, lending credible support to foot voting.

STEFAN SMUTNY, University of Vienna, and Kirsten Wandschneider, University of Vienna

# SESSION 15: CONFLICT AND SOCIAL UNREST

Religion and Conflict: Evidence from China, 1860–1911

This project examines the economic origins and impacts of religious conflicts in the context of late Qing China (1860–1911). While the literature has attributed the antimissionary violence to the cultural clash between Confucianism and Christianity, we show that the missionaries' economic contributions to China through the treaty ports and public goods provision, rather than the strength of Confucianism, significantly attenuated Chinese anti-missionary movements. We then assess the impacts of the antimissionary episode on China's economic development. We find the conflicts discouraged Western merchants from investing in China, evidenced by fewer modern industrial firms and banks. This negative effect also spilled over Chinese domestic modern growth till 1930. The consequences persisted to the present time with conservatism towards international trade, and consequently, fewer foreign investments in regions with more historical conflicts.

CHICHENG MA, University of Hong Kong, FELIPE VALENCIA CAICEDO, University of British Columbia, and YUJING HUANG, UCLA Anderson School of Management

Westward Expansion and the Impact on Native-White Conflicts

Economists have long recognized the tradeoffs between engaging in violence or trade and have applied their framework to Native/White relations on the frontier. More recently, work has shown that histories of violent relations between groups can lead to long run reductions in growth, and enduring poverty. In North America, the intensity of these conflicts varied dramatically across counties, time, and tribes. To understand this pattern of violence we have compiled a panel dataset of Native/White conflicts for more than 200 tribes in the nineteenth century and merged these data with settler and other demographic data. Our analysis reveals two important factors: (i) different types of settlers led to different degrees of violence; and (ii) different types of tribes were more prone to violence than others. In particular less violence occurred with: farming rather than mining; itinerant rather than permanent settlers; and agricultural and hierarchical tribes compared to roving and egalitarian tribes.

LIANG DIAO, INRAE, France,
DOUGLAS ALLEN, Simon Fraser University, and
WARREN ANDERSON, University of Michigan-Dearborn

The Double-Edged Sword of Efficient Communication: The Impact of Telegraph Network on Social Unrest in China

This paper explores the historical context of the introduction of telegraph in nine-teenth century China to examine the impact of communication technology on two types of social unrest: organized revolts led by rebellious groups and spontaneous peasant revolts triggered by production shocks. Using a difference-in-difference strategy and employing the shortest distance to link major destinations as the instrument variable, we find that efficient communication had asymmetric effects on different types of collective actions. On the one hand, the telegraph increased organized revolts and improved coordination among them in telegraph-connected regions. This finding remains consistent when only focusing on a single rebellious group and one major event—" the Wuchang Uprising. In contrast, the telegraph reduced the incidence of weather-shock-triggered peasant revolts by enabling faster and more efficient disaster relief after crises. These findings suggest that technological progress in communication can facilitate coordination for both civic groups and governments.

PEI GAO, Yale-NUS College, Yu-HSIANG LEI, Yale-NUS College, and Shuo Chen, Fudan University

#### SESSION 16: PUBLIC HEALTH

The Urban Mortality Transition and the Transformation of the American City (1880–1930)

Between 1880 and 1930 the urban population share in the United States almost doubled, and the urban mortality penalty in U.S. cities declined dramatically. This paper investigates the effects of the urban mortality transition on labor outcomes and urban amenities in 68 large cities in the United States during this period. First, I provide reduced-form evidence showing that investments in public health infrastructure reduced mortality and affected wages. Second, I use a Rosen-Roback model framework to rationalize the reduced form evidence and quantify the effect of mortality on urban amenities and compensating differentials. Quasi-experimental variation in death rates is generated by the timing of the opening of water filtration plants. The opening of filtration plants reduces overall mortality by 7 percent, and typhoid mortality by more than 50 percent. I find a positive effect on real wages of low-skilled workers, but no effect on wages of high-skilled workers.

PIETRO BURI, Princeton University

How Successful Public Health Interventions Fail: Regulating Prostitution in Nineteenth Century Britain

The market for sex is heavily regulated or banned in most jurisdictions, but our understanding of the consequences of regulation remains limited. We study three laws passed in Britain in the 1860s known as the Contagious Disease Acts (CDAs) aimed at reducing sexually transmitted infections (STIs). These regulations mandated sex workers undergo

routine medical examinations for STIs and gave police the authority to detain women that tested positive for up to nine months. The first part of our analysis shows that the CDAs led to substantial public health improvements. However, these regulations were repealed in 1886. The second part examines the causes of this repeal. Our results show that the success of public health regulations depends not only on the policy's effectiveness, but also on the perceived fairness of the distribution of its costs. These results improve our understanding of a key policy in the women's rights movement in Britain.

Grant Goehring, *Boston University*, and Walker Hanlon, *Northwestern University* 

Water and the Urban Mortality Decline: Micro-Level Evidence from Stockholm

This paper examines the impact of clean water on mortality in Stockholm 1878–1915 using individual-level data combined with the staggered rollout of the water network across buildings. Access to clean water significantly lowered infant mortality, but had no effects on the mortality of children or adults. Infant mortality reductions are evident primarily in poor households. These findings suggest that investments in clean water were an important driver of the urban mortality decline and contributed to the narrowing of socioeconomic mortality differences before World War I.

Mounir Karadja, *Uppsala University*, Thor Berger, *Uppsala University* and *Lund University*, Erik Prawitz, *Linnaeus University*, and Martin Önnerfors, *Stockholm University* 

# SESSION 17: THE EFFECTS OF TRADE WITHIN COUNTRIES

Import Substitution Inequalization? Mexico's Mesocratic Industrialization 1935–1963

From the 1950s to 1982, Mexico experienced a sustained rapid economic growth known as the "Mexican Miracle" or "stabilizing development." Economic growth was driven by the economy's structural transformation from agriculture to industry that started a decade earlier. Underlying this transformation was a process of import substitution industrialization, first a product of the Second World War, and then, from 1945 onwards, a deliberate policy of the Mexican Government. This paper uses new ensembled data in a TWFE and staggered difference in differences identification strategy to show that during the booming years of ISI 1935–1963, the policy resulted in a mesocratic income distribution. It favored the income convergence of the industrial sectors and the formation of a middle class, but the agricultural sector was left behind, thus increasing overall inequality.

Diego Castañeda Garza, Uppsala University

Does Trade Liberalization Boost Innovation? Evidence from French Industrial Sectors in the Nineteenth Century

This study explores the role of trade liberalization on industrial decisions to innovate. To this end, I examine how French industrial producers responded to nineteenth-century

trade liberalization in terms of adopting a key technology at the time: steam power. The identification strategy is based on a diff-in-diff approach, which combines industrial power-use statistics from the earliest French industrial censuses of the 1840s and 1860s with industry-specific tariff-changes detailed in the Cobden-Chevalier Treaty of 1860. My preliminary findings show that trade liberalization had a positive and profound effect on technical change, which I argue was a direct response to increased foreign competition.

CARLA SALVO, Sapienza University of Rome

Labor Coercion and Trade: Evidence from Colonial Indonesia

What determines the use of labor coercion? This paper studies the impact of trade on corvée labor "the payment of taxation in labor" in colonial Indonesia. To do so, I construct a unique database on corvée usage and exports at the residency-product-year level from 1900 to 1940. The results show that trade booms, especially of labor-intensive exports, reduced corvée usage. The effect ran through laborers buying themselves out of corvée. The buy-out option enabled high-productivity laborers to self-select out of corvée without requiring stronger information-collection capabilities of the state. Through such buyouts, the fall in in-kind taxation was mirrored by a rise in monetary taxation. The opposite took place during the trade collapse of the Great Depression. I argue the state's encompassing interest is pivotal in the relationship between public labor coercion and trade. The nature of the relationship between coercer and coerced is thus key in understanding labor coercion.

Mark Hup, Peking University

SESSION 18: RACE, GENDER, AND VOTING

Women's Suffrage and Men's Voting Patterns

Previous studies of female suffrage have interpreted the change in voting patterns as simply reflecting a change in the composition of voters, in part because of the fact that only aggregate voting data was available. We exploit the existence of separate counts for women and men votes in Chile before and after female suffrage. We first show that inference based on aggregates is inaccurate in great part because men also change their voting behavior when women obtain the right to vote. Two potential explanations are provided: men responded to female suffrage through strategic voting and men previously represented in part women's vote due to negotiation within the household. We show evidence consistent with both hypotheses.

Jeanne Lafortune, *Pontificia Universidad Catolica de Chile*, and Francisco Pino, *Universidad de Chile* 

One Question at a Time: The Impact of the American Civil War on Mobilization for Women's Suffrage

This paper investigates the impact of the American Civil War on mobilization for women's suffrage in the United States. I construct a new dataset of soldiers enlisted in

the Union army and their wartime experience. Leveraging variation in soldier's exposure to the largest and deadliest battles, I show that counties with higher shares of such exposure have lower levels of petitioning for women's suffrage in the following years. I find evidence of two possible mechanisms for these results. Firstly, that consistent with historical accounts of tension between the women's suffrage and Black rights movements, newspaper and voting data reveal that Northern counties with higher battle exposure were more focused on Black rights in the aftermath of the war. And secondly, these counties held more tightly to traditional gender norms, with relatively lower female empowerment in the following decades, than counties with lower battle exposure.

ALICE CALDER, University of New South Wales