Abstracts of Papers Presented at the 2021 Annual Meeting

SESSION 1: EARLY INSTITUTIONAL DEVELOPMENT

The Economic Origins of Government

We estimate the effect of six river shifts in southern Iraq in a new archeological panel dataset. A shift creates a demand for government because private river irrigation needs to be replaced with public canals. We show three main results. First, where rivers shift states form, and existing states expand their capacity. Second, these states raise taxes and build canals to replace river irrigation. Third, where canals are built, population stays constant or even increases. Absent canals, the population migrates away. Our results are inconsistent with theories of public good provision that emphasize private negotiation as a substitute for government.

Mattia Bertazzini, *University of Oxford*, Robert C. Allen, *New York University, Abu Dhabi*, and Leander Heldring, *Northwestern University*

Institutions, Trade and Growth: The Ancient Case of Proxenia

Recent scholarship contends that ancient Mediterranean economies were able to grow intensively. A common explanation is Smithian growth spurred by reductions in transaction costs and increased trade flows. This paper argues that an ancient Greek institution, proxenia, was among the innovations that allowed such growth in the period 500–0 BCE. Proxenia entailed a Greek city-state declaring from a different city to be a "public friend," a status that conferred both duties and privileges. Arguably, the functions performed by beneficiaries of proxenia facilitated economic transactions between communities. Text, network and regression analyses confirm the economic significance of proxenia and establish a strong relation between its institutional network and trade intensity. This provides indirect evidence supporting a secular process of market expansion and Smithian growth.

PIER PAOLO CREANZA, Princeton University

Innovation in Disguise: GA Rules and Institutional Development in the Republic of Genoa (1590–1700)

The aim of this paper is to investigate the development of the legislation of general average (GA) in the republic of Genoa between the sixteenth and the seventeenth centuries. Besides the institutional developments and the strategies implemented by the Genoese magistracies, the documentation will be tested with respect to its application. Special emphasis will be placed on researching the new developments in legislation between the seventeenth and eighteenth centuries. I will combine a preliminary legal framework, given by local statutes and jurists texts, with an analysis of primary evidence that, in turn, will allow us a better understanding of the procedure.

Antonio Iodice, University of Exeter and University of Genoa

SESSION 2: HISTORICAL LABOR MARKETS

The Economics of Gender-Specific Minimum-Wage Legislation

During the 1910s, twelve U.S. states passed and implemented the country's first minimum-wage laws. They covered only female employees, often in a subset of industries. We study the impact of this regulation using full-count Census data. Our identification strategy compares county-industry trends in county-pairs that straddle state borders. We find that female employment decreased by at least 3.1 percent at the county-industry level. Across counties, we find that the own-wage elasticity of labor demand varies from around –1.6 to 0.8 as a function of the local cross-industry concentration. Affected female workers switch industries or drop out of the labor force. The latter channel is driven exclusively by married women. We document a rise in male labor demand, and we investigate the channels of substitutions between men and women. While on average men and women are gross substitutes, we find evidence that the margin of substitution is driven by the replacement of women in low-rank occupations with men in middle- or high-rank occupations.

MICHAEL POYKER, *University of Nottingham* and RICCARDO MARCHINGIGLIO, *Analysis Group*

Monopsony in Early Modern Labor Markets

This paper examines the phenomenon of nominal wage rigidity in London in the eighteenth century. Recent approaches in labour economics highlight the potential importance of monopsony in holding down wages for low skilled workers. Based on an unprecedented long run data set of wage payment records at two institutions in London, and shorter observations from many more, we observe a persistent and extreme long run nominal wage rigidity which calls into question systems of market and custom wage determination in this important pre-industrial period. We examine this rigidity in nominal and real terms and, using institutional archival and price series evidence, quantitatively analyse the persistence and breaks of wage bargains. This contributes to debates about the sources of monopsony, employer and labour power and the divergence of real wages and GDP per capita over decades.

Judy Zara Stephenson, University College London, Meredith Paker, University of Oxford, and Patrick Wallis, London School of Economics

Collateral Damage? How World War One Changed the Way Women Work

Drawing on individual-level data from 1911 and 1921 and census-linking techniques, we analyze the consequences of World War I in France on female labor force participation. First, we describe changes in the situation of individual women on the labor market immediately after the war, both in terms of participation and occupation. Second, we study the characteristics of working women before and after in order to understand changes in the composition of the female labor force. Third, and more importantly, we link the situations of women to the local mortality of men to investigate with an unprecedented precision the mechanisms that can explain changes in women's labor market

patterns: increased opportunities for women on the labor market, for example, due to wartime industries, or sheer necessity, as women with less sources of income such as war widows were forced to become wage earners.

LIONEL KESZTENBAUM, *INED*, *PSE* and VICTOR GAY, *TSE*

SECTION 3: MERITOCRATIC REFORMS AND ELITES

Who Benefits from Meritocracy?

Does selecting individuals using competitive exams help or hurt the chances of disadvantaged children? While children from poorer backgrounds might be less prepared to excel in these exams, exams could decrease the importance of connections as well as reduce bias. We study the 1883 Pendleton Act, which introduced competitive exams for selecting certain federal employees. Using a difference-in-differences comparing workers in exempted and non-exempted positions, we find that the reform increased the representation of middle-class children. However, this increase was driven by less representation among the children of the poor, with no change among the rich. The reform brought "educated outsiders" to government jobs, but it did not help underprivileged children.

Santiago Perez, *University of California, Davis* and Diana Moreira, *University of California, Davis*

The Origins of Elite Persistence: Evidence from Political Purges in Post-World War II France

This paper focuses on the mechanisms explaining elite persistence and more specifically, on the connections politicians may leverage on at political transitions. We document this phenomenon in post-World War II France. To purge supporters of the Vichy regime, France set up a two-level system whereby local courts, Comité départementaux de libération, and a central court, the Jury d'Honneur, systematically ruled on the case of each parliamentarian. Our empirical approach uses local courts' decisions as a counterfactual to assess the advantage Law graduates, a historically powerful group in French politics, had before the Jury. In front of the Jury, the clearance rate of Law graduates was 8 percentage points higher than other politicians' whereas it was 2 percentage points lower in front of local courts. An analysis of the still-classified 17,589 documents the Jury d'Honneur filed in defendants' individual dossiers moreover points to the connections of Law graduates as a factor explaining our results.

Jean Lacroix, *University of Paris-Saclay*, Toke Aidt, *University of Cambridge*, and Pierre-Guillaume Méon, *Université Libre de Bruxelles*

Making a Police Officer: Police Quality after the Spoils System in the Urban U.S.

This paper presents new data on the careers of men who became police officers in urban police forces across medium and large cities in the United States between 1880 and 1940. This data is drawn from the rosters of annual police reports and individuals are then matched forwards and backwards to their decennial Census records, where

available. In this paper we firstly create a measure of turnover among police amid changing political regimes (changes in the mayor's office) and assess whether turnover decreased with the advent of merit systems. We then document the extent to which those police forces were representative of the populations that they served. Finally, we explore how the background and quality of police officers changed with the introduction of civil service hiring systems across cities and years. We use information about their previous occupations and those of their fathers to inform this question. This research informs policy design, especially for developing countries today, in how to develop appropriate and effective public jobs hiring systems and ways to provide public goods.

ROWENA GRAY and RAYMOND KIM University of California, Merced

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SESSION 4: THE GREAT DEPRESSION AND ITS LEGACIES

Labor Market Scarring in the Very Long Run: Evidence from Large-Scale Linked Microdata

Recessions may have long-run effects that vary across cohorts, in part because new labor market entrants may face very different constraints and scope for adaptation than incumbent workers. While recent work has focused on relatively short-term labor market scarring, much less is known about the long-run and intergenerational effects of adverse shocks around the time of labor market entry. This project contributes some of the first evidence on life-course labor market scarring by turning to a setting that is intrinsically important and allows for visibility into these issues in the very long run: the Great Depression. To do this, we generate large-scale longitudinal microdata by linking historical and restricted-use modern sources, and pair this with new, granular data on local economic conditions. This allows us to cleanly identify career-stage exposure, and to track individuals through the end of the working life, all while accounting for adaptations and strategic responses.

Vellore Arthi, *University of California, Irvine*, Katherine Eriksson, *University of California, Davis*, and Gary Richardson, *University of California, Irvine*

Income Shocks and Housing Spillovers: Evidence from the World War I Veterans' Bonus

This paper isolates the direct and spillover effects of household income shocks on housing markets in the Great Depression. During the 1930s, the federal government unexpectedly gave World War I veterans a large income transfer. I examine the housing market consequences of this shock using longitudinal data on treated men and their next-door neighbors. The bonus, equivalent to per-capita income in 1936, substantially improved veterans' 1940 home values and homeownership rates compared to those of their 1930 neighbors. Veterans capitalized on this payment to move up the wealth distribution even when abstracting from general equilibrium changes. Gains were concentrated in booming local economies, likely pricing out otherwise similar households. Together, these results indicate that the interaction between household shocks and neighborhood spillovers limited the overall recovery of these markets.

SARAH QUINCY, Vanderbilt University

The Huey Long Spending Program in Louisiana: Estimating Fiscal Multipliers during the Great Depression

Theory suggests that fiscal multipliers should be countercyclical—higher during periods of slack when unemployment is high and lower during boom times. However, despite the depressed conditions of the 1930s, Fishback et al. (2005) find that fiscal multipliers from the New Deal programs were fairly low or even negative. We build on their work and look at a major fiscal spending in Louisiana during the 1930s under populist governor Huey Long. We find very low multipliers at the state level, while county-level multipliers are closer to one for road spending, significantly lower than modern estimates. We identify several reasons for this in the context of historical Louisiana, including the high degree of tradability of output, the low level of human capital accumulation, and the corruption of Long rule.

Gabriel Mathy, American University and Vasudeva Ramaswamy, American University

SESSION 5: MORTALITY RISK AND INSURANCE

Did the 1918–19 Influenza Pandemic kill the US Life Insurance Industry?

We document two puzzling facts during the 1918–19 influenza outbreak. First, we find no significant differences among US life insurers' profitability before or after 1918. Second, there are fewer insurers in distress after the outbreak. We argue that an increase in insurance demand offset higher death claim payouts. Moreover, we find that life insurers from heavily affected states were more likely to issue equity. The prudential control of state regulators also mitigated financial difficulties. The influenza pandemic, while severe from a public health perspective, was arguably a blessing in disguise for the sector.

GERTJAN VERDICKT, KU Leuven and GUSTAVO CORTES, Warrington College of Business

Can Pensions Save Lives? Evidence from the Introduction of Old-Age Assistance in the UK

I study the impact of old-age assistance on mortality using the introduction of public pensions in the UK in 1909 as a quasi-natural experiment. Exploiting the newly created pension eligibility age through a difference-in-difference event-time design, I show that elderly mortality declined after the pension was introduced. The estimated mortality decline is economically relevant, more pronounced in counties with a higher treatment intensity and is driven by fewer deaths from infectious as well as non-communicable diseases. An analysis of individual level census data points to a reduction in crowding and retirement from hazardous work spaces as likely channels.

PHILIPP JÄGER, RWI-Leibniz Institute

The Long-Run Effect of Parental Death: Evidence from Mining Accidents

Roughly one-quarter of children currently grow up in a single-parent household in the United States. Yet little is known about the causal effect of parental absence on a child's adulthood outcomes. In this study, I examine parental death, the most severe form of parental absence and leverage an individual-level historical dataset along with natural experiment that yields plausibly exogenous variation in parental death. Specifically, I utilize records of mining accidents in the U.S. during the earthy 20th century and compare the adulthood outcomes of children of fatal mining accident victims to children whose parent suffered serious, yet non-fatal accidents. Adults who experienced the death of a parent during childhood are more likely to be unemployed, less likely to work in high-skilled occupations, and earn less wage income. Subgroup analyses indicate that the results are driven by adults who experienced the loss of a parent at an early age.

Ezra Gabriel Goldstein, Florida State University

SESSION 6: AMERICAN SLAVERY AND ITS LEGACIES

The Economic Effects of American Slavery, Redux: Tests at the Border

Our analysis of the economic effects of American slavery follows the thinking of Alexis de Tocqueville and Gustave de Beaumont during their grand tour of the United States in 1831–32. We use antebellum census data to test for statistical differences at the 1860 free-slave border, where the environment is the same but the institutions differ. We find evidence of lower land values and less land use on the slave side. This does not support the view that abolition was a costly constraint for landowners. Indeed, the lower use of similar, yet cheaper, land presents a prima facie puzzle: why wouldn't the yeomen farmers cross the border to fill up empty land in slave states, as was happening in the free states of the Old Northwest? More puzzling still is that we find evidence of higher wages on the slave side. We discuss channels of institutional spillovers associated with maintaining slavery.

C. Hoyt Bleakley and Paul Rhode *University of Michigan*

A Nation of Laws, and Race Laws

This paper is inspired by the writings Sadie Alexander, who argued that Race Law in the United States undermined the Rule of Law. We take Rule of Law to mean the written and established laws of the land. We take Race Law to be laws that apply only to race. We review the economic history of African Americans to identify some of the social processes that can reasonably be called Race Laws. Sometimes these laws were explicit, like slave laws, Plessy v. Ferguson and redlining. Sometimes they were norms, like "know your place" enforced by locally condoned mob violence. Race Laws have been decentralized, like Dewey's Law that crowds black workers into Negro Jobs, or

the decentralized racism of white flight from cities in the making of the ghetto. Progress on race relations tends to decentralize Race Laws, so detection of the impact on Rule of Law will prove challenging.

WARREN C. WHATLEY, *University of Michigan* and NINA BANKS, *Bucknell University*

Creative Capacity in a Slave Economy: Invention and Innovation in Southern Cities before the Civil War

To better understand slavery's impact on the broader southern economy, this paper measures the capacity of the southern cities before the Civil War to foster economic creativity, which I define as the ability to employ scientific, engineering, and artistic imagination to produce something that is at once novel and useful. Cities with slavery were among the largest in the nation—including Baltimore, New Orleans, and St. Louis—but had far lower patenting rates than northern cities, including recently established cities in the Midwest and California. Southern cities also had far fewer workers in highly creative occupations, and lagged especially far behind in industries such as publishing, musical instruments, and furniture that combined new technology with important elements of art and design. I find that relatively low levels of education and the inability to attract creative individuals from elsewhere limited the creative capacity of southern cities.

John Majewski, University of California, Santa Barbara

SESSION 7: PROTECTIONISM AND ITS CONSEQUENCES

Distributional Consequences of Trade: Evidence from the Corn Laws

We provide new theory and evidence on the distributional consequences of trade using the 1846 Repeal of the Corn Laws. This large-scale trade liberalization opened domestic markets to the "grain invasion" from the new world that occurred as a result of late-19th century improvements in transport technology. We make use of a newly-created, spatially-disaggregated dataset on population, employment by sector, rate-able values (land and property values), and poor law (welfare transfers) disbursement for around 11,000 parishes in England and Wales from 1801–1911. We show that the repeal of the Corn Laws led to rural outmigration, increased urbanization, structural transformation away from agriculture, increases in rural poverty, and sizable changes in property values. We show that a quantitative spatial model is successful in accounting for these empirical findings, with our estimates implying substantial labor mobility. We find that the aggregate welfare gains from the Repeal of the Corn Laws entailed considerable income redistribution, not only across sectors and factors, but also across geographical regions.

Stephen Redding, *Princeton University*, Stephan Heblich, *University of Toronto*, and Yanos Zylberberg, *University of Bristol* The Smoot-Hawley Trade War

We document the outbreak of a trade war after the U.S. adopted the Smoot-Hawley tariff in June 1930. U.S. trade partners initially protested the possible implementation of the sweeping tariff legislation, with many eventually choosing to retaliate by increasing their tariffs on imports from the United States. Using a new quarterly dataset on bilateral trade for 99 countries during the interwar period, we show that US exports to countries that threatened to retaliate fell by between 15 and 22 percent and US exports to actual retaliators fell by 28–33 percent. These large decreases in trade led to substantial reductions in the welfare gains from trade for all participants. By contrast, there was no systematic impact on these countries' exports to the US. Furthermore, using a new product-level dataset on US exports, we find that the most important US exports to retaliating markets were particularly affected, suggesting a possible mechanism whereby the US was targeted despite countries' MFN obligations.

Kris James Mitchener, Santa Clara University, Kirsten Wandschneider, University of Vienna, and Kevin O'Rourke, New York University, Abu Dhabi

Winners and Losers: The Asymmetric Impact of Tariff Protection on Swedish Firms in the Late 19th-Century

An influential literature documents that while tariffs are negatively correlated with economic growth across countries in recent decades, the correlation is positive during the late 19th-century. One potential explanation for these inconclusive results is that previous studies draw on cross-country regressions. Thereby they do not allow for the possibility that tariffs have a heterogeneous impact across firms. In contrast, this paper leverages detailed firm-level data from late 19th-century Sweden showing that a sharp increase in industrial tariffs has a heterogeneous impact across firms: Initially low-productivity firms see an increase in productivity while initially high-productive firms experience a decline. To explain these results, I provide suggestive evidence that tariffs differentially shape the incentives of managers in low- and high-productive firms to innovate and (re)organize their production. Consistent with modern firm-level trade models, these results suggest that the inconclusive findings of a late 19th-century tariffgrowth paradox may be driven by heterogeneous firm-level responses.

VINZENT OSTERMEYER, Lund University

SESSION 8: AGRICULTURE, INSTITUTIONS AND GROWTH

Learning Is Caring: Soil Heterogeneity, Social Learning and the Formation of Close-knit Communities

This paper studies the impact of social learning on the formation of close-knit communities. It provides empirical support to the hypothesis, put forth by the historian Fred Shannon in 1945, that local soil heterogeneity limited the ability of American farmers to learn from the experience of their neighbors, and that this contributed to their traditional

individualism. Consistent with this hypothesis, I establish that historically, U.S. counties with a higher degree of soil heterogeneity displayed weaker communal ties. I provide causal evidence on the formation of this pattern in a difference-in-differences framework, documenting a reduction in the strength of farmers' communal ties following migration to a soil-heterogeneous county, relative to farmers that moved to a soil-homogeneous county. Using the same design, I also show that soil heterogeneity did not affect the social ties of non-farmers. The impact of soil heterogeneity is long-lasting, still affecting culture today. These findings suggest that, while understudied, social learning is an important determinant of culture.

ITZCHAK RAZ, Hebrew University

The Role of Local Environmental Institutions in Climate Adaptation: Evidence from Conservation Districts in the Great Plains

This paper examines the persistent role of local institutions in natural resource management, especially in the context of soil conservation and climate resilience. After the devastating impact of 1930's Dust Bowl in the Great Plain, the federal government started to focus on soil conservation through the creation of a new local institution named Soil Conservation District (SCD). I construct a new database from historical Soil Conservation Districts' annual reports deposited at the National Archives and study the impact of early adoption of SCDs on climate resilience. Using a novel identification strategy that relies on exogenous variation in patterns of government conservation funding allocation and conservation information dissemination process, I find sizable effects of conservation institutions in the mid-20th century on per-acre crop yield. With the help of prediction-based statistical learning method, I shed light on the positive correlation of later structural and non-structural conservation practices to the early spatial variation of conservation practices.

APARNA HOWLADER, Princeton University

A New Institutional History of Allotment: Evidence from the Pine Ridge Reservation, 1904–1937

The allotment of reservations under the Dawes Act has been extensively written about and studied—often with a focus on the long-term effects. However, there is a fair degree of uncertainty about process by which land was allotted, how and when individuals received titles in fee, and how land was transferred from Native ownership. Our goal in this project is to improve our understanding of the dynamics of allotment and its impact on individuals as the process was occurring by focusing on the Pine Ridge Reservation, which is located in South Dakota. To do this, we have digitized and geocoded land, banking, and reservation-level census records for 8,000 individuals on the Pine Ridge Reservation from 1904 to 1934. We use this data to develop several stylized facts that can deepen our understanding of the allotment process and give new insight into the dynamics of indigenous land loss.

Melinda Miller, Virginia Tech University and Matthew T. Gregg, Federal Reserve Bank of Minneapolis

SESSION 9: RACIAL SEGREGATION AND THE CIVIL RIGHTS MOVEMENT

The Federal Effort to Desegregate Southern Hospitals and the Black-White Infant Mortality Gap

In 1966, Southern hospitals were barred from participating in the Medicare program unless they discontinued their long-standing practice of racial segregation. Using data from five Deep South states and exploiting county-level variation in Medicare certification dates, we find that gaining access to an ostensibly integrated hospital had no effect on the Black-White infant mortality gap, although it may have discouraged small numbers of Black mothers from giving birth at home attended by a midwife. These results are consistent with descriptions of the federal hospital desegregation campaign as producing only cosmetic changes and illustrate the limits of anti-discrimination policies imposed upon reluctant actors.

D. Mark Anderson, *Montana State University*, Kerwin Kofi Charles, *Yale School of Medicine*, and Daniel I. Rees, *University of Colorado, Denver*

The Costs of Employment Segregation: Evidence from the Federal Government under Woodrow Wilson

We link newly-digitized personnel records of the U.S. government for 1907–1921 to census data to study the segregation of the civil service by race under President Woodrow Wilson. Using a difference-in-differences design around Wilson's inauguration, we find that the introduction of employment segregation increased the black-white earnings gap by 8 percentage points. This increasing gap is driven by a reallocation of existing black civil servants to lower paid positions, lowering their returns to education. Importantly, the negative effects extend beyond Wilson's presidency. Using census data for 1900–1940, we show that segregation caused a relative decline in the home ownership rate of black civil servants. Moreover, by comparing children of black and white civil servants in adulthood, we provide evidence that descendants of black civil servants who were exposed to Wilson's presidency exhibit lower levels of education, earnings, and social mobility.

Guo Xu and Abhay Aneja, University of California, Berkeley

World War II and the Roots of the Civil Rights Movement

The effects of the Civil Rights and Voting Rights Acts on Black Americans have been studied extensively, but an open question is what spurred the Civil Rights Movement in the second half of the century and that gave rise to the passing of these laws in the first place. Using military records to construct Black and white World War II draft rates at the county level, we show that areas with higher Black participation in the war saw increased political activism by Blacks after the war including protests and sit-ins. We also show that this activism had a significant impact on vote outcomes in presidential elections and that Congressmen from districts with more Black veterans were

more likely to vote for the different Civil Rights bills. The veteran effect dominates competing explanations such as migration and occupational upgrading of Blacks at the time.

Andreas Ferrara, *University of Pittsburgh* and Marco Tabellini, *Harvard University*

SESSION 10: ON THE IMPORTANCE OF INSTITUTIONS

Institutions Are Not Fundamental

Neo-institutionalism says it is new, but is not. Economic history has been in this business, always. And it says it is obvious, but is not. "Institution" has a baggy definition, tempting its advocates to tautology. And it mixes up necessary with sufficient causes in economic history. The Master Narrative of neo-institutionalism is that we had bad institution's that made us poor. The narrative does not pass a historical or economic tests. We once had bad, illiberal ideas: that was the elemental problem, evident in some places still. Institutions are at best molecules—the atoms are moral sentiments. We need an "ideational," not institutional, economic history, illustrated with the history of sharecropping, financial development, slavery, investment, and above all the Great Enrichment after 1800.

DEIRDRE McCloskey, University of Illinois, Chicago

Nature and Culture in Economic History

The central question of economic history is why are some nations so prosperous while others remain poor. Several thousand years of scholarly inquiry into this question have pointed to climate and culture as key explanations, but both have more recently been rejected by New Institutional Economics in favor of institutions as the rules of the game. This paper surveys the way historians understand institutions—as the costly building blocks of society subject to change and decay—with particular emphasis on how that differs from the NIE's understanding of institutions as rules. In its place, it proposes a new time-dependent or dynamical theory of the coevolution and decay of institutions and the economy, from which we construct an optimally compact model of development that explains all but 13 percent of its observed variance. That model's independent variables are dominated by aspects of nature and culture. Contrary to the claims of the NIE, nature and culture are an essential part of the story of human flourishing.

Anne McCants, Massachusetts Institute of Technology and Daniel Seligson, Independent Scholar

Spanish Missions and Their Impact on Native Americans in the Southwest and California

The Spanish missions in the present-day states of Arizona, California and New Mexico had presence of over two centuries in some cases. Missions are an organization in the North/Wallis/ Weingast tradition and were funded by the Spanish crown. The

missionaries had multiple goals, first and foremost conversion. But they also engaged in education, and health activities. We will assess the impacts from the missions at the superintendency level for the early 20th century and at the reservation level for the 21st century. Our preliminary results for 1911–1917 indicate that the missions increased: Catholicism; the number of churches; English; school attendance; reduced number of minors working; and the number of deaths due to tuberculosis. The magnitudes matter: superintendencies with mission contact compared to those without contact had 95 percent more Catholics, twice as English-speaking individuals, twice as many children attending school and 34 percent fewer working minors.

LEE J. ALSTON, Indiana University, MARIE DUGGAN, Keene State College, and JULIO RAMOS, Pennsylvania State University

SESSION 11: FINANCIAL DEVELOPMENT

Financing Industrialization in Russia and Germany

A large literature debates what system best promotes the accumulation and allocation of capital, especially in late-industrializing countries, where capital market imperfections may be severe. Russia and Germany serve as classic cases to argue that developing economies may successfully employ unusual strategies to promote industrialization, for example, an outsized role for banks or state intervention. Law and finance analysis, moreover, attributes financial system differences to variation in legal systems. We present new evidence comparing Russian and German corporate performance and financial strategies based on firm-level microdata from Russian and German sources around turn of the twentieth century and compare key stipulations of corporate law and their implementation. Contrary to the standard economic backwardness and law and finance literatures we argue that corporations in both countries used similar strategies to finance operations and expansion but that entry restrictions fundamentally distorted patterns of corporate governance and finance in Russia.

Amanda Gregg, *Middlebury College* and Caroline Fohlin, *Emory University*

Monetizing the Economy: National Banks and Local Economic Development

We use a historical laboratory to show that banks impact real economic activity through the liabilities side of their balance sheet, where safer liabilities provide better monetary services. The United States National Banking Act of 1864 was enacted when the circulating money supply primarily consisted of privately issued bank notes. The Act required "national banks" to fully back their bank note liabilities with federal bonds, thereby creating a new and stable currency, which reduced transactions costs and facilitated trade. National banks also faced regulatory capital requirements defined by town population cutoffs. Using the discontinuity in the capital requirement as an instrument for national bank entry, we find that the composition of agricultural production shifted from non-traded crops to traded crops while total production was unaffected.

Moreover, trade activity proxied by employment in trade-related professions and businesses engaged in trade grew. National banks also led to significant manufacturing output growth that was primarily driven by sourcing more inputs.

CHENZI XU, Stanford University and He YANG, Amazon

Bad News Bankers: Underwriter Reputation and Contagion in Pre-1914 Sovereign Debt Markets

This paper uses new bond-level data on sovereign borrowing and defaults during 1869–1914 to quantify a reputation-based channel of contagion via shared financial intermediaries. Concerns over reputation incentivized Britain's merchant banks, who underwrote sovereign bonds, to monitor, advise, and occasionally bail out sovereigns. Default signaled to investors that a merchant bank was not as willing or able to write and support quality issues, indicating that its other bonds may underperform in the future. Consistent with reputation-based contagion, I find that comovement between defaulting and non-defaulting bonds is six times larger when the bonds share an underwriter. To isolate the causal effect of a shared underwriter, I exploit within-country variation in bonds' underwriters. Testing predictions from a dynamic game that models underwriter reputation-formation, I find further evidence supporting reputation as the mechanism, as opposed to alternative explanations. These findings highlight that the reputation of intermediaries that monitor and intervene in crises can be a powerful source of contagion unrelated to a borrower's fundamentals.

Sasha Indarte Wharton, University of Pennsylvania

SESSION 12: INTERGENERATIONAL MOBILITY AND ASSORTATIVE MATING

Assortative Mating and Intergenerational Mobility, England, 1837–2020

It is assumed that marital assortment in social status increased in recent years as women acquired formal education and occupations. This would increase social inequalities and reduce social mobility rates. We show how to estimate the underlying degree of assortment in marriage using the occupational status and literacy of grooms and brides, and their fathers and fathers-in-law. England has copious data on this, through marriage registers 1837–2020, 1.6 million of which we have assembled. We find the underlying correlation of occupational status for spouses was high (0.8) from 1837 to 2020. It did not increase with the introduction of mass public education, and enhanced female educational opportunities, and shows signs of declining. A high degree of assortment in earlier years in England would produce a society rich in terms of "upper tail human capital" and provide another potential explanation of the timing and location of the Industrial Revolution in Europe.

GREGORY CLARK, University of California, Davis and Neil Cummins, London School of Economics

Farm Crisis and Marriageable Men: Changes in Farm Tenure Mobility and Family Formation during the US Farm Crisis of the 1920s and 1930s

This paper evaluates how the U.S. farm crisis of the 1920s and 1930s undermined the traditional farm family by inhibiting movement up the farm tenure ladder from wage worker to tenant to owner. I exploit the geographical variation in the severity of the crisis, defined by dramatic drops in farm commodity prices, and use a shift-share instrument to measure how women responded to reduced farm family economic mobility through adjusted marriage rates, fertility, and off-farm labor force participation. I focus on regional and racial differences in tenure mobility that created heterogenous outcomes between white and Black women and on the interplay among the labor, marriage, and land markets as farm men's "marriageability" fell. I find that white women were more likely to adjust their marriage behavior as a result of the crisis, whereas Black women, whose access to tenure mobility was already greatly inhibited by racism, had less significant responses.

JENNIFER WITHROW, U.S. Census Bureau

The Her in Inheritance: Marriage and Mobility in Quebec 1800–1970

When did spouses begin to strongly match on economic ability? Many believe it is a modern development, a consequence of rising female employment and education levels. Using a large new dataset from Quebec, I find that marriage in Quebec was highly assortative as far back as the early nineteenth century. Moreover, assortment was not merely matching between similar families, but instead depended on the human capital of both men and women as individuals. Finally, I show that the abilities of women mattered as much as that of their husbands for the outcomes of their children.

Matthew Curtis, University of California, Davis

SESSION 13: INSTITUTIONS AND CHINESE DEVELOPMENT

Informal Succession Institutions and Autocratic Survival: Evidence from Ancient China

Despite the lack of formal succession institutions, the Kim family has ruled North Korea for many decades. Can weak institutions promote autocratic survival? This paper looks at one of the weakest succession institutions—the norm of primogeniture in monarchies. I theorize that the norm of primogeniture promotes political stability for two reasons. First, it reduces uncertainty after the demise of the incumbent and provides the elite assurance that their loyalty will be rewarded in the long run. Second, the norm of primogeniture has normative factors that can constraint and shape the behavior and interests of the actors. Using a new dataset covering 357 monarchs in 17 states in ancient China during the Spring-Autumn and Warring States (771–221 BCE) eras, I find that the norm of primogeniture reduces a monarch's risk of being deposed by the domestic elite. Furthermore, I show that a similar pattern persists in today's autocracies.

XIN NONG, University of Texas, Austin

Aristocrats and Bureaucrats

We study the use of aristocrats as administrators in historical societies and their eventual replacement by an impersonal bureaucracy. We argue that in a world with poor technology to identify individuals of high ability, it is advantageous for a regime to employ aristocrats in administration because "tenured" aristocrats have a strong stake in the regime's survival. The advent of an effective technology to nurture or spot talent among commoners does not necessarily lead to greater representation of bureaucrats in government, because the improved calibre of bureaucrats would improve regime survival and make aristocrats more loyal. The usefulness of aristocrats is also influenced by the size of the ruler's domain and the nature of war and transportation technologies. We use our theoretical framework to shed light on variations in the transition from aristocracy to bureaucracy across historical societies, including China, Europe, and Japan.

Tuan-Hwee, Sng National University of Singapore, Jiahua Che, China Europe International Business School, and John K.-H. Quah, Johns Hopkins University

The Changing Wheels Hypothesis. Corruption and Development: Evidence from China

China's recent economic history poses several dilemmas when considering its low institutional development at the beginning of the reform era. Economic growth, along with rising corruption, challenges the widespread sanding wheels view of corruption. The lack of a general theory linking corruption and development prevents us from disentangling China's paradox. This paper fills in this gap by providing the changing wheels hypothesis, which conceptualizes the relationship between corruption and growth from an institutional perspective. This theory not only reconciles previous conflicting findings on corruption but explains the role of corruption in the process of China's recent development. By using the case-study method, I show that Chinese decentralized corruption during the eighties played a key role from an institutional perspective. The institutions I revise are the household responsibility system (1978–1984), the red hat strategy (1980–2002), and the dual-track system (1984–2000). Next, I reinterpret the effect of China's current elite corruption on growth.

BEATRIZ SIMÓN YARZA, University of Navarra

SESSION 14: ORIGINS OF INNOVATION

Labor Supply and Directed Technical Change: Evidence from the Abrogation of the Bracero Program in 1964

Does emigration affect economic development? We study this question in the context of the Italian mass emigration between 1884 and 1913, when twelve million Italians left the country. We assemble a unique dataset at the municipality level, linking cumulative

emigration rates to a number of indicators of economic development throughout the twentieth century. Exploiting variation in the availability of information about the potential gains from migration before the start of mass migration, we construct an instrumental variable for the total emigration rate. Results indicate that while instrumented cumulative emigration was balanced on population before the start of mass emigration, it had a negative, large, and highly persistent effect on short and long run population. Historical mass emigration also reduced educational attainment, income per capita and other proxies of economic development in the long run. Further, we show that emigration favored the expansion of the agricultural sector, at the expense of manufacturing. We speculate that selective emigration was a key mechanism behind our results.

Shmuel San New York University; Hebrew University

Competition and Innovation: The Breakup of IG Farben

The effect of competition on innovation is hard to study causally. I exploit a large, externally motivated breakup in the German chemical industry that resembles a government-mandated reversal of a 4:1 merger. In the early 1950s, the Western Allies occupying Germany dissolved and restructured one of the worlds' largest chemical companies, the IG Farben, along the three occupation zones. The breakup was imposed as a consequence of IG Farben's importance for the German war economy. In innovation space, I compute the industry's exposure to the eventual breakup in the pre-period. Patenting in affected technology areas strongly increased. I leverage fine-grained product-level information on suppliers and prices to analyze effects in product space. The breakup induced long-run product-level competition between the successor companies. Prices in affected product areas experienced moderate declines. At the same time, it led to the crowding in of additional suppliers.

Felix Poege, Max Planck Institute

Financial Development and Patents during the First Industrial Revolution: England and Wales

What are the causes of innovation during the Industrial Revolution? This paper provides new evidence on how access to financial services affected innovation. I examine England and Wales between 1750 and 1825, where technological breakthroughs took place and led to the beginnings of sustained growth. Using an instrumental variable constructed by interacting a dummy of historical post towns status with the linear variable year, I find that better banking access stimulates innovation, and the effects are driven by patents acquired by people in the manufacturing sector. I plan to test whether better banking access affected innovation by increasing the number of firms in the manufacturing sector.

JINLIN WEI, University of Warwick

SESSION 15: VIOLENCE AND COERCION

Warfare and Economic Inequality: Evidence from Preindustrial Germany (c. 1400–1800)

What was the impact of military conflict on economic inequality? This paper presents new evidence about the relationship between military conflicts and economic inequality in preindustrial Germany, between 1400 and 1800. I argue that ordinary military conflicts increased economic inequality. Warfare raised the financial needs of towns in preindustrial times, leading to more resource extraction from the population. This resource extraction happened via inegalitarian channels, such as regressive taxation. Only in truly major wars destruction might outweigh extraction, and reduce inequality. To test this argument a novel panel dataset is constructed combining information about economic inequality in 72 localities and 687 conflicts over four centuries. The analysis finds that the many ordinary conflicts "paradigmatic of life in the preindustrial world" were continuous reinforcers of economic inequality. The findings suggests that there existed two countervailing effects of conflicts on inequality: destruction and extraction. I confirm that the Thirty Years' War was indeed a great equaliser, but this was an exception and not the rule.

FELIX S.F. SCHAFF London School of Economics

Coercion or Adaptation? Expanding African Commodity Exports during the Great Depression

Although terms of trade for African export producers declined rapidly during the Great Depression, export volumes increased sharply in many regions. In this paper, we study two contrasting explanations for this paradox: (i) increased colonial coercion, also causing heightened social distress, (ii) voluntary export expansion in response to price decreases. We use annual, district-level variation in British colonial imprisonment and detailed trade statistics, disaggregated for a large set of export commodities, to investigate the consequences of export expansion. Our first results indicate that export expansion was generally accompanied by spikes in imprisonment, suggesting heightened colonial coercion as main driver.

MICHIEL DE HAAS, Wageningen University, and Bram van Besouw, Erasmus University

Heroes and Villains: The Effects of Combat Heroism on Autocratic Values and Nazi Collaboration in France

Can heroes legitimize strongly-proscribed and repugnant political behaviors? We exploit the purposefully arbitrary rotation of French regiments to measure the legitimizing effects of heroic credentials. 53 percent of French line regiments happened to rotate under a specific general, Philippe P'etain, during the pivotal WWI battle of Verdun (1916). Using recently-declassified intelligence data on 95,314 individuals, we find the home municipalities of regiments serving under P'etain at Verdun raised 7 percent more Nazi collaborators during the P'etain-led Vichy regime (1940–44). The

effects are similar across joining Fascist parties, German forces, paramilitaries that hunted Jews and the Resistance, and collaborating economically. These municipalities also increasingly voted for right-wing parties between the wars. The voting effects persist after WWII, becoming particularly salient during social crises. We argue these results reflect the complementary role of the heroes of Verdun in legitimizing and diffusing the authoritarian values of their former leader.

SAUMITRA JHA, *Stanford University*, Julia Cagé, *Sciences Po*, and Pauline Grosjean, *UNSW*

SESSION 16: MIGRATION AND ITS EFFECTS

Emigration and Economic Development: Evidence from the Italian Mass Migration

Does emigration affect economic development? We study this question in the context of the Italian mass emigration between 1884 and 1913, when twelve million Italians left the country. We assemble a unique dataset at the municipality level, linking cumulative emigration rates to a number of indicators of economic development throughout the twentieth century. Exploiting variation in the availability of information about the potential gains from migration before the start of mass migration, we construct an instrumental variable for the total emigration rate. Results indicate that while instrumented cumulative emigration was balanced on population before the start of mass emigration, it had a negative, large, and highly persistent effect on short and long run population. Historical mass emigration also reduced educational attainment, income per capita and other proxies of economic development in the long run. Further, we show that emigration favored the expansion of the agricultural sector, at the expense of manufacturing. We speculate that selective emigration was a key mechanism behind our results.

GIANLUCA RUSSO, University of Pompeu Fabra, NICOLA FONTANA, London School of Economics, MARCO MANACORDA, Queen Mary University, and MARCO TABELLINI, Harvard University

Internal Migration and the Diffusion of Schooling in the US

This paper studies the role of internal migrants in the spread of schools over the United States in the second half of the 19th century. I find that counties had higher school enrollment rates for the local population if they received migrants from more educated states. This finding emphasizes the role of internal migrants in the diffusion of education across newly-settled states, explaining inequality in school enrollments through the background composition of settlers. To explore the mechanism, I use a novel dataset (the Census of Social Statistics) with a detailed description of school finances. I show that a likely channel was the increase in public spending on schools, which significantly reduced the costs of enrollment. To deal with the migrants' selection of destinations based on the local level of schooling, I use a new instrumental variable: the similarity in potential yields between the origins and the destinations.

Vasily Rusanov, New York University

The Sun Never Sets on the British Empire's Money Orders

Millions of people migrated in the Global South during the first wave of globalization, but the large amounts of remittances that they sent home are largely understudied. Who sent them? Why? I utilize unique microdata and the institutional arrangement of Indian indentureship in Trinidad in the 1880s to address both. I show that upper-caste individuals were more likely to remit and sent more during and just after indentureship. Furthermore, time exacerbated this trend: while other castes appear to have lost ties with India, upper caste connections, proxied by remittances, remained the strongest over time. Higher return migration by upper castes may have motivated this behavior, which points to the strength of caste ties across locations.

ALEXANDER PERSAUD, University of Richmond

SESSION 17: URBANIZATION AND SOCIAL CHANGE

Rooted to the Soil: Social Housing and Population in Ireland since 1911

Ireland is one of the least urbanised high-income countries in the world, despite its exports being concentrated in activities prone to clustering. We examine one factor that may have contributed to this, the introduction of rural social housing by the UK government prior to Ireland's independence. We exploit detailed data on the location of 50,000 heavily subsidized cottages built for agricultural labourers 1883–1916, in 200 districts across Ireland. We find sizeable effects of the intensity of treatment on subsequent population growth. These findings are robust to the inclusion of a wide array of controls. A causal interpretation is supported by the total absence of pre-trends, zero results from a placebo test and IV analysis exploiting the combination of a 1906 legislative change and the outbreak of WWI. A 1-SD increase in cottages built is associated with 17 percentage points more growth, in a setting where the median district shrank 19 percent 1911–2002.

RONAN LYONS, Trinity College Dublin and ALAN DE BROMHEAD, Queen's University Belfast

The Birth and Persistence of Cities: First and Second Nature in Oklahoma's Urban Development

This paper enlists three natural experiments to examine the influence of first- and second-nature forces on the process of city formation in Oklahoma from 1890 through 1940. The rapid settlement of 7.6 thousand square kilometers of previously unoccupied land in 1889 allows for clean estimation of the importance of first nature for explaining the spatial pattern of initial settlement. Persistence or second-nature forces dominate in explaining population growth over the first decade of settlement to 1910. The second experiment is the oil boom of 1900 to 1940, which altered the productivity potential of many locations in Oklahoma. Oil shocks increased population in those areas most profoundly affected and had a stronger long-run impact in areas with a higher initial population. The third experiment is the adverse impact of erosion in the 1930s, which reduced town population by 10 percent on average.

JOHN C. Brown and David Cuberes, Clark University

Transportation Technology, Individual Mobility and Social Mobilization

Between 1881 and 1910, Swedish society underwent two transformative developments: the large-scale roll-out of a national railway network and the nascence of grassroots social movements which came to dominate economic, social and political spheres well into the twentieth century. Using exogenous variation in railway access arising from initial plans for the network, I show that well-connected municipalities were more likely to host a local movement and saw more rapid membership growth and a greater number of distinct organisations. The mobility of individuals is a key mechanism: results are driven by passenger arrivals into connected municipalities, not freight arrivals. I implement a market access framework to show that, by reducing least-cost distances between municipalities, railways intensified the influence exerted by neighbouring concentrations of membership, thereby enabling social movement spread. Subsequently—in Sweden's first election with universal male suffrage in 1911—municipalities with greater social movement mobilization exhibited higher turnout and Social Democrat vote shares.

ERIC MELANDER, University of Namur

SESSION 18: TECHNOLOGY ADOPTION: CAUSES AND CONSEQUENCES

The Long-Run Gains from the Early Adoption of Electricity

This paper explores the effect of the early adoption of technology on local economic development. While timing and intensity of technology adoption are key drivers of economic divergence across countries, the initial impact of new technologies within advanced countries has been incredibly illusive. Resolving this puzzle, this paper documents that the early adoption of electricity across Switzerland was conducive to local economic development not just in the short-run, but also in the long run. Exploiting exogenous variation in the potential to produce electricity from waterpower, this paper finds that electricity adoption at the end of the 19th century led to local differences in structural transformation. However, despite access to electricity becoming quickly universal in the early 20th century, due to the expansion of the electricity grid, economic development did not converge across areas. Instead, areas which adopted electricity early continue to be more industrialized and have higher incomes today. In particular, the geographical distribution of the newly emerging and innovative chemical industry was shaped by early electricity adoption, while employment gains through the building and operation of new power plants themselves were mostly short-lived. The main mechanism through which differences in economic development persist in the long-run is through increased human capital accumulation and innovation, rather than persistent differences in the way electricity is used.

Björn Brey, University of Nottingham

Technology Transfer and Early Industrial Development: Evidence from the Sino-Soviet Alliance

This paper studies the effects of international technology transfer on early industrial development, using evidence from the Sino-Soviet Alliance. In the 1950s, the Soviet Union supported 156 technology transfer projects in China, that involved the construction of large capital-intensive plants in heavy industries, the transfer of state-of-the-art

Soviet machinery and equipment, and technical assistance and knowhow diffusion from Soviet engineers to the Chinese counterpart. To estimate the causal effect of the program we exploit that, due to unanticipated political tensions, some projects were built as planned (treated projects), while others were eventually realized by China only without any Soviet technology or assistance (comparison projects). We find that: (1) treated plants had better performance that comparison; (2) Soviet technical assistance diffused industry-specific knowledge through the training of Chinese engineers that further increased plant outcomes; (3) the program generated local horizontal and vertical spillovers.

MICHELA GIORCELLI, *UCLA* and Bo LI *Tsinghua University*

Management, Productivity, and Technology Choices: Evidence from U.S. Mining Schools

I propose a view of managers as shifters of technology adoption. Using a historical case study, I examine how the first entry of mining college graduates into management positions in Pennsylvanian coal mines affected technological change and productivity growth. I find that mining college graduates had no direct effects on mine productivity in a Hicks-neutral or factor-biased way. They did, however, increase productivity indirectly by 5.2 percent per year by lowering the fixed cost of the most efficient new coal hauling technology, electrical locomotives.

MICHAEL RUBENS, KU Leuven; UCLA