

A large, stylized letter 'C' in a light green color with a dark green outline, positioned on the left side of the cover. The background features a light blue gradient with a vertical green stripe on the left and a vertical red stripe on the right, both bordered by thin dark green lines.

**THE**  
**LIOMETRIC**  
**SOCIETY**

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**Winter 2013**  
**NEWSLETTER**

# *The Cliometric Society*

Winter 2013 Vol 28 No. 2

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### **The Newsletter of the Cliometric Society**

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**Editor's Note:** Apologies for taking so long to get the summaries of the 2013 EHA to you. It's been a busy few months.

In this issue we are pleased to feature the second half of the extensive interview with Tony Wrigley, which was conducted by Tim Guinnaine.

We have also brought back the Book Preview. All members who have forthcoming books are encouraged to send me a summary or excerpt for publication here.

Here's to hoping that the cold and wet winter of 2013-14 will end soon in the Northern Hemisphere, and that our members in the Southern Hemisphere will have a more pleasant winter.

Warm regards,

--Mary Hansen, Editor

# Economic History Association 2013 Annual Meeting

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*Reported by Fernando Arteaga, Ryan Budny, and Aaron Honsowetz (all George Mason Univ.) and Matt Davis, Megan Fasules, Gabe Mathy, and Matthew Reardon (all American Univ.). Edited by Mary Eschelbach Hansen (American Univ.)*

The 73<sup>rd</sup> Annual Meeting of the Economic History Association was held in Washington, DC, from September 20-22, 2013. Fifteen sessions on the theme of “Global Perspectives” were presided over by President Robert Allen and organized by the Program Committee (Stephen Broadberry, Chris Meissner, Peter Coclanis, and Carol Shiue) and the Local Arrangements Committee (John Wallis, David Mitch, Mary Hansen, Noel Johnson, Mark Koyama, John Nye, Peter Meyer, and Claire Morgan).

## Institutions & Geography

Scott Abramson (Princeton) opened the Institutions and Geography panel with “The Economic Origins of the Territorial State.” Abramson challenges the stylized fact that the rise of large states was inevitable due to the evolution of the technology of weapons over time. He contends that an increase in urbanization caused political fragmentation. Using a GIS database of independent states in Europe from 1100-1789, he finds that states decreased in size over time. He also constructs an IV for urbanization. The IV results support his theory that an increase in urbanization results in smaller territorial states.

Jean-Laurent Rosenthal (Caltech) considered Abramson’s paper to be great, but wanted the title to better reflect the paper’s emphasis on the survival of mini/micro states in the interior of Europe up to the French Revolution at the same time the states on the outside of Europe got larger. Rosenthal also wondered if the real story is if changes in military technology make it easier to be a small state.

Karen Clay (Carnegie Mellon) presented “Resources, Politics, Economics, and Curses: Evidence from United States 1929–2002.” The paper, co-authored with Alex Weckenman (also Carnegie Mellon), looks for evidence of a resource curse within the United States. Research on the resource curse predominately compares countries, but Clay and Weckenman construct a panel dataset of U.S. states from 1929 to 2002 and hypothesize that, if resources increased political corruption, then elections should be less

competitive when natural resources are a larger percentage of the gross state product. However, elections in U.S. states are either just as competitive or more competitive in states with abundant natural resources. A higher percentage of GSP derived from natural resources correlates with a decline in per capita income growth within a state.

Gavin Wright (Stanford) was skeptical; he thinks the resource curse is “junk science.” He claimed that the use of resource stocks instead of resource flows would eliminate any evidence of a resource curse. Wright questioned whether using the competitiveness of political elections is the appropriate measure of political corruption.

The panel’s final paper was “The Persistence of (Subnational) Fortune: Geography, Agglomeration, and Institutions in the New World,” presented by William F. Mahoney (World Bank). Co-written with Felipe Valencia Caicedo (Univ. Pompeu Fabra and LSE), the paper shows that pre-colonial population density predicts current population and income. Or, as the speaker put it, “if you had a lot Aztecs (historically) then you are rich today.” Persistence exists because early colonizers took advantage of the the geographical advantages as pre-colonial inhabitants.

Alejandra Irigoien (LSE) was worried about the construction of geographical boundaries. Since the land units in Mahoney’s and Caicedo’s dataset are irregular shapes based on modern political borders, Irigoien feared the results might be driven by historical circumstance of political borders and not by pre-colonial population density.

## Education & Human Capital

Joerg Baten and Dacil Juif (Univ. of Tübingen) were first to present in the session titled “Education and Human Capital.” They presented “A Story of Large Land-Owners and Math Skills: Inequality and Human Capital Formation in a Global Perspective.” The authors create a new dataset to measure the influence of land inequality on long-run human capital formation. High inequality in land ownership adversely affected human capital formation. Concentration of land ownership hampered the emergence of institutions like public schools. High levels of numeracy early on are a good predictor of

more recent cognitive skills.

Dietrich Vollrath (Univ. of Houston) doubted that the relationship was causal. He noted that different configurations of land ownership can have the same Gini coefficient and that this could be slightly problematic. Two societies with disparate configurations of land ownership but the same Gini coefficient could have divergent investments in education.

Tomas Cvrcek (Clemson) and Miroslav Zajicek (Univ. of Economics in Prague) presented “School, What is it Good For? Schooling and Human Capital Investment in the 19<sup>th</sup> Century Hapsburg Empire.” Cvrcek opened the presentation by stating that the answer to the question asked in the title of the paper depends on who is pushing for the education. The paper contrasts the typical story that education comes about from popular demand. Using the example of the Hapsburg Empire, the authors argue that political elites push for schooling in order to make populations “politically reliable.” Elites supported schools politically and financially only when they taught in the desired language. Conflict between nationalities motivated education rather than a desire for economic development. Cvrcek showed a painting from a 19<sup>th</sup> century Hapsburg school of young boys smoking and joked that smoking

## EHA Prizes Awarded at the 2013 Meetings

**Allan Nevins Prize** for the Best Dissertation in U.S. or Canadian Economic History

Joshua Hausman, for his dissertation “New Deal Policies and Recovery from the Great Depression,” completed at the University of California at Berkeley Advisors: Barry Eichengreen, J. Bradford DeLong, Christina Romer, Maurice Obstfeld, and Noam Yuchtman

**Alexander Gerschenkron Prize** for the Best Dissertation in non-US or Canadian Economic History

Eric Monnet, for his dissertation “French Monetary Policy and Credit Control, 1945-1975,” completed at the Paris School of Economics and EHESS. Supervised by Pierre-Cyrille Hautcoeur.

**Jonathan Hughes Prize** for Excellence in Teaching Economic History

Stephen Haber: Stanford University.

**Arthur H. Cole Prize** for the best article in the previous year’s volume of the Journal of Economic History

Dan Bogart, UC-Irvine, and Latika Chaudhary, Scripps College, for their article “Engines of Growth: The Productivity Advance of Indian Railways, 1874-1912,” published in the June 2013 issue of the Journal of Economic History.

**Gyorgy Ranki Biennial Prize** for Outstanding Book on the Economic History of Europe.

**2013 Winner:** Regina Grafe, Northwestern University/European University Institute, Florence, for her book *Distant Tyranny: Markets, Power and Backwardness in Spain, 1650-1800*, published by Princeton University Press, 2012

was the one thing they actually did learn to do in school.

Alexander Klain (Univ. of Kent) thought that the paper pushed the political economy argument a little further than was justified. The discussion of the paper was quite lively. Tamas Vonyo (LSE) wanted to see how much of total variation is explained by local and district fixed effects. John Nye (George Mason) suggested that, if a large portion of education is about signaling rather than learning, it might not matter so much what the content taught in the schools was. The drilling in religious material may be useful as a signal.

Third to present in the session Edward Kosack (Univ. of Colorado—Boulder). He presented “The Bracero Program and Effects on Human Capital.” The Bracero program was a guest worker program that allowed Mexican workers to temporarily work in the United States and that existed from 1942 to 1964. Kosack estimates how Bracero migration influenced spending on education and enrollment numbers in the Mexican states that Braceros came from. He concludes that Bracero

migration increased enrollment in schools and spending on education. The additional income, as well as the ideas that Braceros brought back to Mexico from the U.S., made the improvements in human capital possible.

Graciela Marquez (Colegio de Mexico) opened with a story about a Bracero program participant. He was illiterate, but his granddaughter was able to go to college and is now presenting at the EHA conference! Graciela wanted the paper to include an explanation of why the program was eliminated and whether or not illegal immigration played a role in its termination. She suggested that Kosack look at two periods of time differently. The two period being the program's inception to the end of the Korean War and secondly, the Korean War to the termination of the program in 1964).

### Colonialism

Wim Van Lent (ESSEC Business School) started the session with "Local Elites versus Dominant Shareholders: 200 Years of Dividend Policy at the Dutch East India Company." Co-written with Stoyan V. Sgourev (also ESSEC Business School), the paper asks why dividends for the Dutch East India Company went from erratic to consistent. Dividend smoothing is commonly seen as a response to agency problems between shareholders and company managers. The authors find that ownership was more concentrated during the era of dividend smoothing. This result runs counter to the theory of dividend smoothing in response to an agency problem because a higher concentration of ownership reduces the cost of shareholders supervision cost of agents. Dividend smoothing increased as Jewish investors based in Amsterdam increased ownership of the Dutch East India Company: Older managing elites resisted the increasing influence of the Jewish investors by not being transparent with company activities. Jewish investors had an agency problem with the current management, making dividend smoothing a desirable policy even though there was a higher concentration of ownership.

Peter Koudijs (Stanford) pointed out that dividend results should not matter when there are no transaction costs. Possible transactions costs are from taxes, agency theory, or asymmetric information. He felt confident that the story about the Dutch East India Company was not driven by taxes. The fact that dividend smoothing occurred after more concentration indicated that there is something wrong with agency theory and that the paper needed to do a better job of explaining why agency theory failed.

Warren C. Whatley (Michigan) pushes economists to rethink how they are using data from the Ethnographic

Atlas in "The Impact of Colonialism on African Development: Evidence from the Ethnographic Atlas." He and his co-author Morgan Henderson (also Michigan) find that the data from the Ethnographic Atlas captures the effect of the colonial period, not the pre-colonial period. The data should be analyzed based on the colonial tenure up to the time the data was collected. African countries managed with a decentralized political administration had more monogamy, greater rule by local leaders, and less equality in inheritance. Colonies that were politically centralized had a rapid decline in slavery and more delegation of political authority.

Mark Koyama (George Mason) felt the presentation was a marked improvement over the paper. While Koyama was intrigued by the results between centralized and decentralized colonial regimes, he wanted to see more evidence on the validity of the instrumental variable used in the paper. He suggested that the authors reflect on what their results would mean for previous research done by Darren Acemoglu, Simon Johnson, and James Robinson.

Dongwoo Yoo (West Virginia Univ.) questions if British colonization was better than the French in his case study of Vanuatu. His paper follows the joint French and British rule of Vanuatu. Residents of Vanuatu could select British or French customs. Yoo points out that they could live along Avenue General De Gaulle in the Port Villa French Quarter, or walk up the same street which becomes Winston Churchill Avenue in the British Paddock. New settlers could select their legal tradition. Yoo finds that while the British dominated the economy early on the French grew to dominate the Vanuatu economy. French laws were so favorable that not only did new immigrants select into French laws, but old British nationals also found ways to operate under French legal jurisdiction.

Elise Huillery (Sciences-Po) questioned the generalizability of a case study of Vanuatu. The ability to test if the French or the British are better colonizers is difficult because there are so many differences between the two. Generalizing the outcome in Vanuatu is also limited since Vanuatu administrations were nothing like a normal British or French colonial administration. She was worried that the economic results were being driven by the more favorable French law on indentured servitude. She felt that the paper relied too heavily on anecdotal evidence and that Yoo needed to do more research on the self-selection of colonists to Vanuatu.





*Peter Meyer gives the Plenary address.*

Marlous van Waijenburg (Northwestern) compares and contrasts the British and French colonial tax systems in the paper “Endogenous Colonial Institutions: Lessons from Fiscal Capacity Building in British and French Africa, 1880-1940.” Co-written with Ewout Frankema (Wageningen), the paper considers why the French colonies are considered more repressive than the British. They construct a PPP-adjusted comparison of per capita government revenue. They show that tax systems were a product of geography: it was much easier to collect taxes in coastal territories than landlocked territories. A comparison of similar French and British territories shows that tax systems are similar in similar geography.

Claudia Rei (Vanderbilt) wanted to know more about why colonial tax policy is a good measure of institutional quality. She thought the paper would benefit by having more data from the 19<sup>th</sup> century. She also wanted the authors to elaborate more on how the data within the paper was collected.

### Depression & Recovery

Martha Olney (Univ. of California—Berkeley) and Aaron Pacitti (Siena College) presented “Goods, Services, and the Pace of Economic Recovery.” Recoveries in the United States have been slow since the mid-1980s. Olney and Pacitti argue that the increasing share of services in the US economy drives this result. They argue that producers of goods producers can make purchases at the beginning of a recovery in expectation of high demand in the

future, while producers of services cannot accumulate inventory. They consider the share of goods and services in each state and exploit this variation to explain the speed of recovery for each state to its previous employment peak. They find that an increased service share predicts a longer and slower recovery.

Christopher Hanes (SUNY—Binghamton) had concerns about trend growth between states, which would make recovery to the previous employment peak faster even if the economy had not recovered to trend. He also wondered why the result was asymmetric: states with a higher share of services did not enter recessions more slowly, but did recover more slowly, than those with more goods production. Hanes argued that the inventory argument should apply symmetrically as well, with inventory draw down driving goods-reliant states into recessions faster than service-reliant states. He also wondered about other omitted variables, like reliance of resource extraction and construction.

Andrew Bossie (SUNY—Graduate Center) presented “Rethinking the World War II Economy: The Welfare Effects of World War II and the Role of Household Demand in the Postwar Boom.” This paper considered an “orthodox” view, which holds that postwar demand is strong due to repressed demand, and a “revisionist” view (attributed to Higgs, Vedder, and Gallaway) which holds that the war involved a decline in consumption and welfare, with a recovery driven by a return to a market economy and household

dissaving. Bossie argues that the orthodox view largely holds up. The consumption decline depends on the price deflator used and is not as severe as the revisionists argue. There is little dissaving in the postwar period, but the boom in housing can be seen as a form of one group dissaving which drove the postwar recovery.

Hugh Rockoff (Rutgers) pointed out that there was no debt crisis in the postwar period, which meant that people kept their savings in government debt. After the war, people had large liquid balances and wanted to spend, supporting the recovery. Monetary policy played a role: the Fed pegged bond prices and provided an expansionary monetary policy. Thus, much of the debt was monetized. The postwar housing boom was also related to monetary policy, as interest rates were kept low and credit was plentiful.

Natacha Postel-Vinay (LSE) presented “What Caused Chicago Bank Failures in the Great Depression? A Look at the 1920s.” The paper examines whether the Chicago banking crisis was driven by a liquidity crisis or a solvency crisis by looking at the bank balance sheets from the 1920s. One theory would be that failed banks were weaker ex-ante, while another theory (say, by Friedman and Schwartz) might be that liquidity problems were the main driver of banking failures. Postel-Vinay argues that the theories can be reconciled. The failing banks were heavily invested in illiquid assets, but they also faced significant liquidity pressures. Weak banks in Chicago were significantly exposed to mortgages, which boomed in the 1920s. These housing contracts seemed safe, but they weren’t, as they were often renewed and had no amortization.

Mark Carlson (Federal Reserve Board) showed a map of Chicago, and wondered whether the geographic distribution within the downtown central business district mattered for default rates. Carlson was not as convinced about the emphasis made by Postel-Vinay on liquidity, as the banks with worse balance sheets may have simply had larger liquidity problems.

Martin Uebele (Univ. of Groningen) and Thilo Albers (Univ. of Muenster) presented “A Monthly International Data Set for the Interwar period: Taking the Debate to the Next Level.” Existing Depression research relies on annual and cross-sectional data, but there are significant possibilities offered by time-series analyses using higher frequency monthly data. Their dataset, which comes from German

statistical yearbooks, includes data on real output, trade, prices, and monetary and banking variables for many countries. They constructed business cycle indicators for the countries in their sample, replicating Mathy and Meissner (2011). They largely confirm the result of the previous study, with the exception of the exchange control countries. Exchange control countries experience less co-movement than other countries, in accordance with economic theory, as opposed to Mathy and Meissner who found no relationship between exchange control countries and business cycle co-movement.

Gabriel Mathy (American) began by commending the authors on the dataset, which will likely be the basis for many papers in the future. He discussed the way the business cycle indicators were constructed, noting that they included price, trade, and money and banking data, which should not be included. Their inclusion means that there are measures of integration on both the right-hand side and the left-hand side. Mathy suggested that constructing the business cycle index based on only real variables would allow for more empirical tests of business cycle co-movements using prices, trade, and money and banking data as determinants of business cycle co-movement. Mathy also suggested a way to improve the filtering methods used in time-series analyses of the Great Depression. Currently many modern filtering methods like the Hodrik-Prescott filter will place too much of the variation during the Depression in the trend, which makes the de-trended decline in output during the 1930s very mild. Using a Baxter-King filter allows a researcher to take out high-frequency variation (“noise”), medium-frequency data (“cycle”), and low-frequency data (“trend”). By increasing the frequency of data included in cycle, less of the variation will be placed in the trend term, which will hopefully resolve the problem.

In the discussion that followed, Uebele and Albers were asked if Hitler directed his bureaucrats to meddle with the data. They responded that the statistical agency was apolitical. Price Fishback suggested that there are housing data for the Depression. Alex Field (Santa Clara) asked if Postel-Vinay could include more information from the national real-estate market conditions.

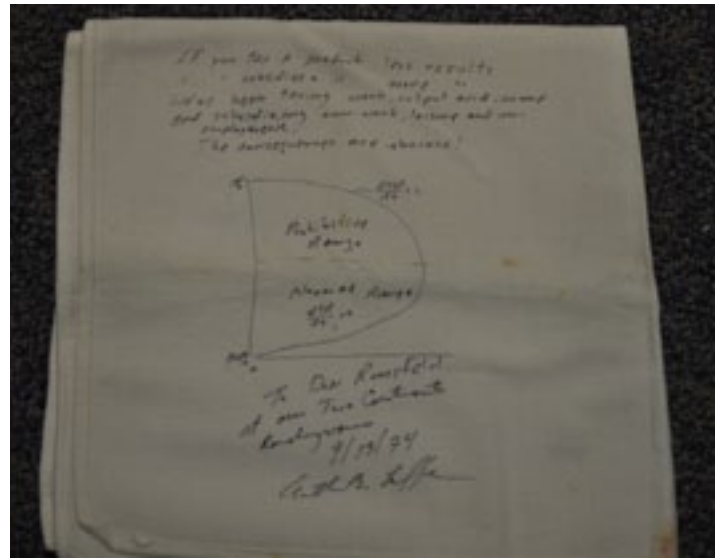
### Labor Markets

The session on labor markets opened with Sam Allen’s (Virginia Military Institute) presentation of

“The Impact of Progressive Era Labor Regulations on the Manufacturing Labor Market.” His co-authors are Price Fishback (Univ. of Arizona) and Rebeca Holmes (Cox Communications). The paper explores the impact of state labor regulation in the US manufacturing labor markets from 1899 to 1919. They constructed a labor law index to use as a proxy of the extent of regulation. The index accounts for the (changes in) specific procedures in each state. More regulation had no effect on the level of employment. Regulation had a heterogeneous impact on the income of laborers: It reduced the income of wage earners, but it did not have a discernible effect on the pay of salaried workers. Carolyn Moehling (Rutgers) focused her comments on the suitability of the index to measure regulation. She was concerned about endogeneity in the labor laws. The discussion from the floor discussion expanded on this idea. Questions were asked about the heterogeneity of the laws passed during the period and about differences in enforcement.

Jessica Bean (Denison) presented “Intergenerational Labor Supply in Interwar London,” which relies on the detailed 1929-31 New Survey of London Life and Labour. Bean explores the composition of household labor supply in London in the interwar period: Was there an interrelationship between the labor force participation of younger and older members of a family? Bean’s main findings are that: (a) Young adult females were substitutes of the “wife” for household duties in cases where the wife worked for wages, (b) There was a negative relationship between a father’s income and the labor force participation of other younger males in the family, and (c) Wives of unskilled men were more likely to work. The discussant was Susan Wolcott (Binghamton), who emphasized the usefulness of the data. Additionally, Wolcott recommended a comparison to other studies of labor force participation and an accounting for the demand side of the labor market.

Sumner La Croix (Hawaii) presented “Sons, Daughters, and Labor Supply in Early Twentieth-Century Hawaii.” His coauthor is Timothy Halliday (also Hawaii). The paper uses the 1900, 1910, 1920, and 1930 Territorial Censuses of Hawaii to explore how Hawaii’s remarkable diversity and high ratio of women to men might have impacted the labor market. It concludes that, irrespective of race, the highly skewed sex ratio increased women’s bargaining power, and because of that, the female labor participation tended to diminish in the presence of children. The



*Tour goers saw the famous Laffer curve napkin!*

only exception was Japanese women, who kept working even after having children. Bishnupriya Gupta (Univ. of Warwick) wanted a clearer definition of “cultural values” and greater discussion of the similarities and differences between Asian countries of origin. She argued, for example, that Koreans and Chinese shared Japanese views on female labor participation.

Yukiko Abe (Hokkaido Univ.) concluded the session with the presentation of “On the Historical Development of Regional Differences in Women’s Participation in Japan.” Giorgio Brunello (Università degli Studi di Padova) is her coauthor. The study of women’s labor force participation in Japan is important because it is generally believed that its low levels have hindered Japan’s growth. The paper dissects the changes in female labor participation in Japan from 1930 to 2010, both nationally and regionally. Nationally, there was convergence between female and male participation. Regional differences seem to be due to supply disparities, especially disparities in the availability of childcare and the maintenance of the traditional multigenerational household. Joyce Burnette (Wabash College) focused her comments on the need for an analytical narrative to better explain regional differences, and encouraged an exploration of regional differences in demand as well as supply.

#### Plenary: EHA, Econ History, & Wikipedia

The plenary session was given by Peter Meyer (BLS). It covered how Wikipedia works and how it is edited. By way of introduction, EHA President Robert Allen (Oxford) suggested that members of the EHA may



have a professional obligation to make the information on Wikipedia more reliable. EHA Executive Director Price Fishback (Arizona) encouraged all to write articles for [eh.net](http://eh.net) and then link to those articles from Wikipedia.

Wikipedia is not a website; it is server-based software operated by the Wikimedia Foundation. Authoring and editing of entries is done almost entirely by volunteers. There are software tools called “bots” that identify and remove vandalism.

Peter Meyer demonstrated how to create an account and edit pages. Every edit of an article has a date attached to it so anyone can see the entire history of an article.

Questions asked and answered included:

*Q: Why does Wikipedia often shows up first in Google searches?*

A: Since Wikipedia is so frequently cited it gets a very high rank in Google’s algorithm.

*Q: Who adds the warning banners that sometimes appear at the top of Wikipedia articles labeling them as suspect?*

A: Anyone can label an article as suspect or take the label down, but the banner can’t change more than three times in 24 hours.

*Q: Are new articles are checked by anyone before they appear online?*

A: When new pages are put up volunteers get an email and can tag the page for speedy deletion if they so choose. If the author doesn’t contest, the page will be deleted.

*Q: How do you know if a particular topic is notable enough to warrant an article about?*

A: It is subjective. An article’s author should make the case for notability at the very beginning of the article to avoid it getting taken down.

#### Useful links:

- [en.wikipedia.org/wiki/Wikipedia:Meetup/DC/EHA](http://en.wikipedia.org/wiki/Wikipedia:Meetup/DC/EHA)
- [http://econterms.net/pbmeyer/wiki/images/9/95/EHA\\_and\\_Wikipedia\\_Sep2013\\_0x.pdf](http://econterms.net/pbmeyer/wiki/images/9/95/EHA_and_Wikipedia_Sep2013_0x.pdf)

#### Africa

The first paper in the session on Africa was presented

by Johan Fourie (Stellenbosch Univ.) and was discussed by Jan de Vries (UC-Berkeley). The paper considers market integration within South Africa and between the country and others before unification. Grain prices indicate that South Africa was well integrated with the world economy. However, prices failed to converge within the various parts of what would become South Africa.

Leigh Gardner (LSE) presented “Was Independence Really Better than Colonial Rule? A Comparative Study of Liberia and Sierra Leone.” Sierra Leone and Liberia have similar origins as areas of resettlement, but one country was independent (Liberia) while the other (Sierra Leone) was a British colony for much of its history. Gardner argued that colonialism was beneficial to Sierra Leone: colonialism provided loan restraint, which provided for better credit terms, and supported slightly better educational outcomes than Liberia. Discussant Ann Carlos (Colorado) described Gardner’s paper as a difference-in-differences approach with a treatment of colonialism for Sierra Leone relative to the control of independence of Liberia. Carlos suggested further comparisons of the make-up of the government, the make-up of those in power, and ethnic fragmentation.

The last paper was “Colonial Investments and African Development: Further Evidence from Railroads in Kenya” by Alexander Moradi (Sussex), Remi Jedwab (George Washington Univ.), and Edward Kerby (LSE). The paper argues that railroad construction drove white settlement in Kenya, which then drove later development patterns. Discussant Rick Hornbeck (Harvard) was concerned that the railroad lines were not chosen at random but were built in areas ripe for development. He asked the authors to further consider access to markets and changes after the railroads ceased operation.

#### Railroads

Matthew Jaremski (Colgate) asks if railroads were built where banks already existed or if banks arose because of the existence of railroads in “American Banking and Transportation Revolution Before the Civil War”. He and his co-authors Jeremy Atack (Vanderbilt) and Peter L. Rousseau (also Vanderbilt) construct a GIS dataset that combines Atack’s railroad and canal dataset, Michael Haines’ U.S. Census data, and Warren Weber’s data on bank locations to answer their question. They find instances of railroads built in locations that already have banks and banks entering

along the path of railroads. Jaremski believes that railroads were built in locations that already had banks because railroads utilized them for funding construction. He also believes that banks followed railroads because railroads opened up new economic frontiers to banks.

Peter Temin (MIT) noted that for his whole career economic historians have been talking about railroads! He asked: Should economists tell people to build railroads or tell them to build banks? The answers, of course, are “yes and yes.” He asked the authors to consider further the role of the distance between banks and railroads, but the authors noted that bank data was only available by county.

In “Locomotives of Local Growth: the Short and Long Term Impact of Railroads in Sweden” Kerstin Enflo and Thor Berger (both Lund Univ.) ask if railways caused long-run urban and industrial development. They construct a GIS data set of Swedish railroads and Swedish urban statistics. They find that between 1855 to 1890 railroads accounted for 50 percent of urban growth, and that over 150 years railroads accounted for 20 percent growth. Prior to the construction of the railroad there were no growth rate differences between cities. They argue that railways may have caused growth in the short term by lowering the costs of manufacturing centers. They gave three reasons why the benefits of railroads persisted: sunk investment in infrastructure, amalgamation economics in cities, and connections to future railroad/infrastructure improvements.

Kris Inwood (Univ. of Guelph) asked the authors for more work on regional development. He noted that there were locations that would have been served by railroads built before 1855 that were not served by a state-built railroad. Inwood also wanted more pre-treatment controls. Finally, Inwood pressed the authors to calculate social savings and compare railroads with a water alternative.

In “By How Much Did Railroads Conquer the West?” Ross Knippenberg (Colorado-Boulder) measure the impact of railroads on market integration. He constructs a dataset of 14,000 different prices of commodities in various locations across the United States. He finds that railroad connections in the West resulted in a rise in prices of food prices and a decline in the prices of manufactured goods, as comparative advantage would suggest. Obtaining a railroad connection reduced price differences between cities by about 70 percent.

### Population & Health

Martin Dribe (Lund) opened the session on Population and Health with “Socioeconomic Status and Fertility: Insights from Historical Transitions in Europe and North America.” The paper, co-authored by a team of twelve, considers difference in marital fertility by social class before and after the fertility transition. They looked at individual-level data from six different populations, which followed women from marriage to age 50. Using event-history analysis of birth intervals,



*Theresa Gutbertlet summarizes her thesis at the dissertation session.*

they found only small differences, with the wealthiest reducing their fertility slightly ahead of the less wealthy. Discussant Michael Haines (Colgate) praised the data, saying that 40 years ago people would only have dreamed about being able to conduct this research. He suggested that the authors should extend this paper to include infant and child mortality. Other audience members wanted more detailed discussion of the opportunity cost of child rearing and the significant changes in marriage behavior over time.

Briggs Depew (LSU), Griffin Edwards (Univ. of Alabama-Birmingham) presented “Alcohol Prohibition and Infant Mortality.” The paper is also co-authored by Emily Owens (Univ. of Pennsylvania). The paper uses the death registry from 1900 to 1919 to determine death by age and cause of death and takes advantage of the variation in timing and type of state prohibition laws to compare the outcomes in states that passed laws and states that did not. “Bone dry” laws decrease deaths of infants. Discussant Shari Eli (Toronto) suggested giving examples of how prohibition would affect infant and child mortality and disaggregating “internal” and “external” causes of death to explore the nature of the causal effect. For instance, she thought the authors could distinguish between infectious and non-infectious diseases. Audience members found the results surprising because it is sometimes argued that that women increased their alcohol consumption during the prohibition by going to speakeasies.

Anthony Wray (Northwestern) closed the session with “Childhood Illness and Occupational Choice in London, 1870-1911,” which is co-authored by Krzysztof Karbownik (Uppsala Univ.). The paper measures the extent to which childhood illness restricts social mobility. They linked childhood illness to long-run occupational and demographic outcomes using inpatient hospital admission records from London from 1870 and 1890. Hospitalization reduced wages and hospital patients were less like to be married as adults. Discussant Werner Troesken (Univ. of Pittsburgh) suggested that choice of occupation may mediate the effect of childhood illness and recommended consideration of blue versus white collar occupations. He asked the authors to exploit the episodic nature of disease and weather inversions that launched the famous London fogs.

### Institutions & Beliefs

Jared Rubin (Chapman) and Avner Grif (Stanford)

presented “The Reformation, Political Legitimacy and the Origin of the Modern Economy in England.” The paper defines legitimacy as “obedience based on the moral obligation to follow authority.” Legitimizing agents are those who openly show respect for authority. The break with Rome that Henry VIII instituted reduced the legitimizing power of the Church and increased the Legitimizing power of Parliament and its secular components.

Lee Alston (Colorado-Boulder), Marcus Melo (Federal Univ. of Pernambuco), and Pernaldo Mueller (Univ. of Brasilia) presented the conceptual framework for a book in progress entitled “Beliefs, Leadership, and Economic Development: Making the Critical Transition.” Because parties are usually trying to protect their rents, more is known about persistence (of underdevelopment) than about making the critical transition to sustained prosperity. The presentation uses a case study of Brazil to illustrate important elements of the transition to becoming an open society and economy. Key elements are windows of opportunity, beliefs, and leadership.

Jordi Vidal-Robert (Univ. of Warwick) presented “The Persistence of the Inquisitorial Mind: Long-Run Effects of the Spanish Inquisition.” The paper explores how the Inquisition reduced economic growth by reducing trust in institutions (measured in modern data) and inventive activity (measured in historical patent figures).

(A summary of discussant comments for this session was not available.)

### Industry & Trade

Felipe Benguria (Univ. of Virginia) began the session on industry and trade with “U.S. Manufacturing during the Great Depression: Evidence from the Biennial Census of Manufacturers.” The paper uses a new dataset covering 350 industries in 1927 and 1937 and disaggregated by state and industry to estimate the impacts of credit constraints on employment and wages. The author’s empirical strategy uses the geographic variations in bank lending to measure credit supply across states. He finds that less lending resulted in lower employment. Discussant John Moore (Walsh College) highlighted the role of business as the source of demand for credit. Understanding demand for credit by businesses would require additional measurements such as cost structure

and availability of equity.

Tamas Vonyo (LSE) followed with “The Wartime Origins of the Wirtschaftswunder: The Growth of West German Industry, 1938-1955.” The study uses industry-level growth accounts to examine the patterns of growth experienced by West Germany. The author hypothesizes that war dislocation and supply bottlenecks persisted much longer than previously thought. The persistent dislocation caused by the division of Germany resulted in input-driven growth in the early post-war years, with the productivity gap closing only much later. Noel Johnson (George Mason Univ.) suggested the author consider the impact of price controls.

Paul Sharp (Univ. of Southern Denmark) ended the session with his presentation of “Winners and Losers from Globalization: Why Both European and US Farmers Were Angry in the Grain Invasion Era, 1870-1900.” The paper is co-authored with Karl Gunnar Persson (Univ. of Copenhagen). The goal is to explain the agrarian revolts, which happened despite increase in real price for agricultural produce. The authors claim that frontier farmers felt short-changed because they felt transportation and transactions costs were unfairly high. The ratio of western state to east coast wheat prices is correlated with the share of votes for the populist candidate (which favored tight railroad regulation) in the 1892 Presidential elections. Joles Hugot’s (Sciences-Po) discussion of the paper noted alternative explanations for both the uprising and the populist voting shares, including the populist campaign to drop the gold standard and the high interest rates in frontier states.

### Financial Crises

The first presentation in the session on financial crises was by Alexander Field (Santa Clara Univ.) on “The Savings and Loan Crisis in the Shadow of the 2000s.” Field argues that while by salacious coverage of the scandal including wild parties and congressional corruption made the S&L crisis seem important at the time, the real importance of the period was that the ratio of household debt to income experienced an increase that has been persistent. Discussant Jonathan Rose (Federal Reserve Board) provided an overview of major S&L busts in American history. The 1890s bust fueled attempts to establish geographically diversified S&Ls; the 1930s bust was driven by an unexpected deflation, and the 1980s bust was due largely to interest rate mismatch.

Moritz Schularick (Univ. of Bonn) presented “Sovereigns versus Banks: Credit, Crises, and Consequences” with co-authors Alan Taylor (UC—Davis) and Oscar Jorda (Federal Reserve Bank of San Francisco). The paper asks whether economists should worry more about an abundance of private debt or about an abundance of public debt. High private credit growth predicts a deeper recession. Higher government debt does not predict a deeper recession alone, but when combined with a financial crisis, high government debt does predict a deep recession. The intuition is that high public debt at the time of financial crises leaves little space for counter-cyclical policy. Discussant Peter Rousseau (Vanderbilt) asked how to distinguish between a credit build-up or financial development? They amount to the same thing empirically, but one is good and one is bad. Rousseau asked the authors to consider the counterfactual of a US economy without credit booms. While the counterfactual economy would perhaps avoid financial crisis and recessions, the growth rate would be anemic. Perhaps the negative after-effects of credit booms are worth the cost?

The final presentation, by Peter Temin (MIT), was entitled “Currency Crises from Andrew Jackson to Angela Merkel.” Temin argues that that banking crises are also often currency crises. Temin uses the (Trevor) Swan Diagram, which illustrates states of internal balance and external balance based on the real exchange rate and domestic demand. Because of the tradeoff between internal and external balance, resolving currency crises often leads to domestic (banking) crises. This dynamic can be seen in crises such as 1836, the Civil War, Germany in 1931, the US and the UK in 1931, the Asian crisis of 1997, and finally in the current Euro crisis. Discussant Barry Eichengreen (UC-Berkeley) noted first that defining currency and banking crises is tricky; classification is not obvious. He also noted that economies with floating exchange rates could have currency crises: India had a balance of payments crisis recently despite also having a floating exchange rate.

### Presidential Address

Introducing Robert Allen (Oxford) was Alan Olmstead (UC-Davis). Among Olmstead’s offerings was footage from the opening ceremony of the 2012 Olympics in London – interpreted as a tribute to Allen. The first clip was of workers tearing up the idyllic countryside to make way for industrialization. Later footage

showed a crowd chanting what sounded like “Hey, Bob!” (it was unclear what the crowd was actually chanting...) Another clip was presented as a tribute to Allen’s work on iron and steel: it showed the Olympic rings being forged from molten metal. Olmstead claimed that the camera cut away just as the letters A-L-L-E-N were each put into one of the rings.

Allen opened with an economic history joke: An instructor was talking about 16<sup>th</sup> century England and said that people had figured out how to buy cheap and sell dear. A student responded that they understood why they would buy “sheep,” but couldn’t understand where they got the “deer” from.

Allen’s address was titled “American Exceptionalism in Global Perspective.” Allen discussed the meaning of “exceptionalism” and distinguished between economic and political exceptionalism. Allen considered the causes of American economic exceptionalism. He rejected resource abundance and financial development and concluded that the US developed high productivity in manufacturing because of two important economic policies: tariffs and compulsory education. Tariffs created an incentive to invest in domestic industry. Compulsory education took children out of the labor force. As a combined result, American factory owners invented machines to do the tasks normally taken care of by children. Allen referred to this as the “cornerstone” of American exceptionalism.

Allen contrasted the experiences of India and Egypt with the experiences of the US and Britain. Because of cheap labor there was little incentive for Egypt and India to invest in capital, even as globalization created opportunities for trade.

Allen concluded that pre-1895 American development was not exceptional, but after 1895, American development became exceptional. The American model of growth cannot be duplicated. America was a high-wage economy from the start.

### Finance

Marc Flandreu (Graduate Institute of International and Development Studies, Geneva) opened the session with the presentation of “Governing Global Capital Markets: Collective Action Clauses, Bondholder Committees and the London Stock Exchange in the 19<sup>th</sup> Century, 1827-1868.” Flandreu argues that the

London Stock Exchange did an excellent job assessing bonds and that the CFB was created not, as previously believed, because bondholders were disorganized and couldn’t estimate its investments properly, but because they were too powerful. The creation of the CFB was itself the result of a process that intended to replace shady monopolists with a more transparent and accountable board. Discussant Larry Neal (Univ. of Illinois at Urbana-Champaign) remained skeptical that a listing on the London Stock Exchange was a key to bond buyers. He noted that during the US Civil War both Union and Confederate governments issued bonds successfully without being listed in the LSE.

Veronica Santarosa (Univ. of Michigan) presented “Pre-Banking Financial Intermediation: Evidence from a Brokerage Law Reform in Eighteenth Century Marseille.” The paper traces the evolution of finance and credit in places that were far from the major financial nodes. Santarosa argued that, because Marseillan traders were the only ones that adhered to the Edict of 1709, they were able to operate beyond mere financial intermediation and could engage in proper banking activities. The financial crisis of 1774 and the revocation of the Edict ended their privileged status. Discussant Philip Hoffman (Caltech) encouraged Santarosa explore more deeply why the Marseillans adhered to the Edict of 1709 while the rest of France did not. He suggested their role in certain markets may have been important.

Haelim Park (U.S. Treasury) closed the session with her paper “Did the Reserve Requirement Increments of 1936-1937 Reduce Bank Lending? Evidence from a Natural Experiment.” The paper is coauthored with Patrick van Horn (New College of Florida). The study makes use of the fact that national banks were required to follow Fed’s directions while state banks were not, so all national banks were Fed member banks while some state banks were non-member banks. The main findings are that bank lending did not contract after reserve requirement was raised and the behavior of member banks was indistinguishable from that of nonmember banks. Discussant Eric Hilt (Wellesley) who noted that for Friedman and Schwartz the Fed’s sterilization of gold inflows was as important in explaining the recession as the increase in the reserve requirements. Hill advised the authors to take into account other monetary propagation mechanisms.

### Technology

James Bessen (BU Law School) opened the session on



technology with “Diffusing New Technology without Dissipating Rents: Some historical case studies of knowledge sharing,” which is coauthored with Alessandro Nuvolari (Sant’ Anna School of Advanced Studies, Pisa). The paper asks why innovators frequently share their new technologies openly, rather than capturing rents through patents or other licensing methods. The authors propose that when the new technology both coexists with an older technology and is constrained in some way (via input or knowledge limitations) the benefits from exercising intellectual property rights may be lower than the costs, measured in terms of lost innovation from collaborators. Case studies of weaving in the United States, Bessemer steel production in the United States, and Cornish mining support this framework, which can also help to explain the relatively low levels of patents during the Industrial Revolution.

Ross Thompson (Univ. of Vermont) asked a number of questions about the limits of using case studies and asked the model’s predictions would hold in non-competitive markets, which are following innovation. Paul Hohenburg (RPI) asked about the marginal cost of new technologies in their infancy, and David Mitch asked about the process of knowledge-sharing.

Leonard Dudley (Université de Montréal) followed with a presentation of “Necessity’s Children? The Inventions of the Industrial Revolution.” The study examines the role of “cooperative” innovations in the Industrial Revolution, which the author defines as innovations that had two or more inventors. Cooperative innovations were concentrated within specific regions of the UK, France, and United States, leading the authors to conclude the social networks between intellectuals in these areas foster an environment of innovation. Running a horse-race between variables measuring the supply-side, demand-side, and social networks explanations for innovation, they find that for cooperative innovations, social networks are most important.

Felipe Valencia Caicedo’s (Universitat Pompeu Fabra) requested a theory of the mechanism via which social networks lead to greater innovation. Other participants noted that the location where things were commercialized is not necessarily the same as where they were invented. Observers noted the impossibility of eliminating demand-side explanations for innovations: any innovation that persisted and spread was, by definition, demanded by many.

Harry Kitsikoupoulos (New York Univ.) closed the session with “The Diffusion of Newcomen Engines, 1700-70: A Revisionist Assessment.” Unlike previous studies, which look at engines in use, Kitsikoupoulos uses new data sources and engineering rules of thumb to estimate the proportion of horsepower in use at any given time and argues that the steam engine was slow to diffuse and did not achieve particularly high rates of use relative to potential over its first 70 years of existence. He shows particularly slow uptake in iron mining.

Joel Mokyr’s (Northwestern) discussion of the paper noted that horsepower, while important, is not an indicator of use; rather, it indicates economic value. A spirited speech on the value of the steam engine, even if not widely used, followed.

#### Session 14: Migration and Inequality

Bill Collins (Vanderbilt) opened the Migration session with “The Great Migration in Black and White,” (co-authored with Marianne Wanamaker). The authors find that observable characteristics do not explain the south-to-north migration of blacks compared to the east-west migration preferences of whites. Social networks based on prior migration also do not account for differences. Offered as a plausible explanation are “regional amenities,” which might vary by race. Discussant John Brown (Clark) noted that black migrants made choices that look very similar to the choices foreign immigrants, so the question might be better phrased by asking “What makes native whites different?” He also suggested using railroad networks as a better measure of distance and as a potential clue for where migrants might end up.

“Pogroms, Networks, and Migration: The Jewish Migration from the Russian Empire to the US 1881-1914” was presented by Yannay Spitzer (Northwestern). Spitzer finds that the first round of pogroms in 1881-1882 had no discernible impact on migration to the United States, but a second round from 1903-1906 did. He explains that it was the interaction between living through a pogrom and having a network that led to migration.

The careful collection of vast data from a variety of Old- and New world sources drew high praise from discussant Ran Abramitzky (Stanford). Ian Kaey (Queen’s Univ.) noted that the networks could operate through the mechanism of reduced capital constraints or uncertainty, providing funding to migrants. John

Brown (Clark) wondered why a network had to be hyper-local - based on a member of one's town having migrated. Spitzer noted that it did seem that personal relations drove the networks.

The missing super-rich in Canada are the subject of Livio Di Matteo's (Lakehead Univ.) "Tops and Bottoms: Wealth Extremes in Late Nineteenth Century Ontario - Where Were the Rich People?" Despite having a large amount of income inequality, Canada has historically lacked those with great fortunes, at least when compared to other Anglo developed nations. The author proposes a variety of explanations, including the possibility that some early condition has persisted through a path-dependent process. The situation that can be partially, but not fully, explained by wealthy Canadians moving away—typically to the United States.

Chris Minns (LSE) noted that comparing wealth and income distributions for Canada might be helpful, and he wondered if it was possible to determine whether wealthy Canadians living in other countries gained their wealth in Canada or in their destination locations.

#### Long Run Growth & Living Standards

Peter Jensen (Univ. of Southern Denmark) opened the session with "The Heavy Plow and the European Agricultural Revolution of the Middle Ages," which is co-authored by Christian Skovsgard and Thomas Andersen (also Univ. of Southern Denmark). The paper considers the extent to which the adoption heavy plow in medieval Europe led to higher yields and increased population and population density. The authors use difference-in-differences methods to exploit the variation in fertile clay soils and find significant urbanization and population density increases where the heavy plow was used. However, they cannot say anything about relative importance of geography and institutions.

Discussant Eona Karakacilli (Univ. of Western Ontario) suggested that the authors consider climate and livestock in their analysis. Joerg Baten (Univ. of Tübingen) pointed out that the heavy plow areas are where grain was suitable. He suggested the authors omit cattle-raising areas. Anne McCants (MIT) suggested looking at archeology evidence.

Guido Alfani (Bocconi Univ.) presented "Economic Inequality in Northwestern Italy: A Long-term View (Fourteenth to Eighteenth Centuries)." The paper uses data from *estimi* to look at wealth distribution and general economic inequality using Gini coefficients. He finds that inequality grew everywhere.

The discussant, Peter Lindert (UC—Davis) was unable to attend, but Tamas Vonyo (LSE) channeled Peter by asking if it would be possible to create social tables. From a development economics point of view, the problem with comparing Gini is that you can have the same Gini with different distribution patterns. Paul Hohenburg (RPI) pointed out the concentration of land holding may have to do with how agriculture evolved.

Mauricio Drelichman (Univ. of British Columbia) and David Gonzalez Agudo (Univ. Complutense de Madrid) closed the session and the conference with their presentation of "Housing and the Cost of Living in Early Modern Toledo, 1489-1650." The paper seeks an understanding of housing costs in early modern urban Europe, as well as the role of housing in standards of living across income groups. Little is known about housing and real estate before 1800, so the authors create a new database of 183 urban rental properties in Toledo between 1489 and 1650. They find that changes rents correspond with historical events. For example, rents drop during plagues, revolts, and famines.

Regina Grafe (Northwestern) thought the data were remarkable; however, she was not entirely convinced if the authors could distinguish if the rich pay for fancy house or location. She also urged the authors to explore the impact on urban political economy and short-lived impact of the move of the capital to Madrid. Jose Espin (Northwestern) though elevation was important and that prices might differ for a house on flat land compared to on a cliff.

The next meeting of the Economic History Association will be held September 12-14, 2014 in Columbus Ohio. The theme selected by President Philip Hoffman is "Political Economy and Economic History." Information and links are available at <http://eh.net/eha/category/meetings/2014-meeting/>. ■

## Book Preview: **The Pox of Liberty: How the Constitution Left Americans Rich, Free, and Vulnerable to Infection**

Forthcoming from the University of Chicago Press, *Markets and Governments in Economic History* (Price Fishback, series editor) expected release data, 2015

*By Werner Troesken, University of Pittsburgh*

In *The Pox of Liberty*, I argue that, from colonial times to the mid twentieth century, disease prevention efforts in the United States were shaped by an inter-connecting web of ideologies and institutions. The ideas and ideologies that were most important in shaping the American approach to disease prevention were three-fold. First, from their colonial inception, Americans showed a deep ideological attachment to forms of governance that were decentralized and rooted in private consent and voluntary action. Second, because Americans placed a high value on commercial success and economic prosperity, those values also influenced the practice and implementation of public health policies. While commercial and economic values are often portrayed as inimical to public health, there is evidence to suggest that such values could, at times, foster better public health outcomes. Third, the rise of the germ theory of disease interacted with, and reshaped, political beliefs and ideologies to usher in a vast expansion in the size and scope of government involvement in public health, particularly at the local level.

The institutions that mattered most in forging the American approach to disease prevention can be divided into four categories: democracy; private property rights; federalism; and protections of individual liberty. Democratic institutions allowed American politicians at all levels of government (state, federal, and local) to enjoy greater electoral success through investments in disease prevention. This aligned political and public health incentives: throughout the nineteenth century, good sanitation and disease prevention were good politics. As for private property rights, they enabled politicians to make credible promises about future behavior to potential lenders, private entrepreneurs, and taxpayers. Secure property rights were critical to the development of urban water supplies, arguably the single most important public health initiative in American history. In terms of federalism, the American commitment to decentralized governance was well suited for localized epidemics and disease outbreaks, but was less adept at controlling epidemics and health problems that crossed state borders. Probably the most important institution protecting individual liberty in the face of encroachments by public health officials was the Fourteenth Amendment. As explained in the book, the Fourteenth Amendment played an important role in forestalling universal vaccination against smallpox in the United States. ■



*Discussing dissertations at the posters between sessions.*

## 2013 Clio Fellows

The Cliometric Society is pleased to announce the election of five new fellows.

### Barry Eichengreen



Barry Eichengreen is the George C. and Helen N. Pardee Professor of Economics and Political Science at the University of California—Berkeley, a chair he has held since 1999. He is also a Research Fellow at the Centre for Economic Policy Research and a Research Associate at the National Bureau of Economic

Research. He received MAs in economics and history and his PhD in economics from Yale University. He arrived at Berkeley in 1986 after serving on the faculty at Harvard from 1980-86. He has also been a Senior Policy Advisor to the International Monetary Fund, and has held visiting positions in Australia, the U.K., Singapore, China, Austria, the Netherlands, Germany, France, Israel, Canada, and Sweden.

He spent 1979-80 as a Fulbright-Hayes Scholar at Oxford, working under the tutelage of Nick Crafts. Along with Mark Thomas, Steve Broadberry, and Mary McKinnon, he worked in the Treasury and Foreign Office records related to the 1931 financial crisis and the 1932 general tariff.

He served as the President of the Economic History Association (EHA) from 2010-11, and at various times he has been a member of the Board of Directors of the Social Science Research Council, the Economics Panel of the National Science Foundation, the Board of Trustees of both the EHA and the Cliometric Society, and a member of the editorial board of several academic journals.

In 2009 he was awarded the Schumpeter Prize, and in 2011 he was named one of the top 100 Global Thinkers by Foreign Policy Magazine. His honors also extend to the classroom. He received the Distinguished Teaching Award in Social Sciences at Berkeley in 2003, and the Hughes Prize for excellence in teaching from the EHA in 2002.

Professor Eichengreen's work has been translated into French, Mandarin, Portuguese, complex

Chinese, German, Korean, Russian, Japanese, Italian, Greek, Bulgarian, Chinese simplified, Spanish, and Hungarian, exemplifying its global coverage and interest. His book *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System* (Oxford University Press, 2011) received critical acclaim. It was selected as finance and economics book of the year by the China Business Network and made the top ten lists of *The Independent* and *The Globalist*.

### Alexander Field



Alex Field is Michel and Mary Orradre Professor of Economics at Santa Clara University. He obtained his AB in economics from Harvard, his MS from the London School of Economics and his PhD from the University of California—Berkeley in 1974. His first position was at Stanford; he moved to Santa Clara in 1982. He also held

visiting positions at Berkeley and the Institute for Advanced Study at Princeton.

He is the author of four books and dozens of articles, ranging from his dissertation topic on educational reform and manufacturing in 19<sup>th</sup> century Massachusetts to industrialization and skill intensity, industrial growth, factor productivity studies, and macroeconomic models. His book *A Great Leap Forward: 1930s Depression and U.S. Economic Growth* won the Alice Hanson Jones Award from the Economic History Association (EHA), and an Alpha Sigma Nu National Book Award, both in 2012. In 2011 it was named a Choice Outstanding Academic Title in Economics.

He served as Academic Vice President at Santa Clara from 1986-87 and served on the university's Board of Trustees from 1988-91. He was Associate Dean of the Leavey School of Business and Administration from 1993-96 and Acting Dean during the 1996-97 academic year. He is currently chair of the Department of Economics. He served as Executive Director of the EHA from 2004-12, edited *Research in Economic History* from 1996-2010, and served on the editorial boards of numerous journals and on the economics panel for the National Science Foundation



(NSF).

He has taught courses in American and European Economic History, 20<sup>th</sup> century U.S. economic history, the evolution of modern business enterprise, the history of thought, and game theory and human behavior, among many others.

In addition to his book awards he has been named a Phi Beta Kappa Visiting Scholar for 2013-14, and won the Nevins Prize from the EHA for the best dissertation in American economic history in 1975. He has also been a Woodrow Wilson Fellow and an NSF Fellow, and has received grants from the NSF and the NASA-Ames Research Consortium, among others.

### Philip Hoffman



Philip Hoffman is Rea A. and Lela G. Axline Professor of Business Economics and Professor of History at the California Institute of Technology, where he has been since 1980. He received his PhD. and MPhil in history from Yale and his MA in mathematics at the University of California—Berkeley. He did his undergraduate work in math at Harvard. He has held visiting positions at École des hautes études en sciences sociales, the Paris School of Economics, and Washington University, and was a George A. and Eliza Gardner Howard Foundation Fellow in 1984 and a Guggenheim Fellow in 2001.

He has been the recipient of grants from the Russell Sage Foundation, the National Science Foundation (NSF), the National Endowment for the Humanities (NEH), and the American Council of Learned Societies. He has also served as a referee for the Guggenheim Foundation, the NEH, and the NSF, among others.

He is currently the President of the Economic History Association (EHA), and recently completed a four year term as co-editor of the Journal of Economic History. He has served on numerous other editorial boards and committees, including the Board of Trustees of the Cliometric Society.

Professor Hoffman is the author of numerous papers

and three award winning books. In 1984 he was awarded the John Gilmary Shea Prize of the American Catholic Historical Association for his book Church and Community in the Diocese of Lyon, 1500-1789 (Yale University Press). In 1997 he won both the Allan Sharlin Prize of the Social Science History Association and the Economic History Association's Gyorgy Ranki Prize for Growth in a Traditional Society (Princeton University Press), and in 2001 he again was awarded the Ranki Prize, this time for Priceless Markets: The Political Economy of Credit in Paris, 1660-1870 (University of Chicago Press). In 1992 he received the Arthur H. Cole Prize from the EHA and the Nancy Lyman Roelker Prize from the Sixteenth Century Studies Conference for his article "Land Rents and Agricultural Productivity: The Paris Basin, 1450-1789," published in the Journal of Economic History in 1991.

### John Komlos



John Komlos is Visiting Professor of Economics at Duke University, a position he has held since retiring as Professor of Economics and Chair of the Institute of Economic History at the University of Munich. He joined the faculty at the University of Munich in 1992, chairing the Department of Economics from 1997-99. He is also a Research Associate at the National Bureau of Economic Research and a member of the CESifo Research Network.

He holds University of Chicago PhDs in both history and economics and an undergraduate degree in physics from the University of Illinois. He has held visiting positions at the University of St. Gallen, Duke, the Population Center at the University of North Carolina—Chapel Hill, and the University of Vienna. Prior to arriving in Munich he was an Associate Professor of History and Economics at the University of Pittsburgh from 1986-92.

He has long been an advocate for the importance of economic history and its contributions to economics in both academia and the general public. He has been a frequent guest on national media in Germany, the U.S., France, Spain, the Netherlands, the U.K., and Australia, including NPR, NBC Today, Good Morning America, and the Daily Show. He has been



extensively quoted on economic history topics in popular press publications such as *The New Yorker*, the *New York Times*, *Suddeutsche Zeitung*, *Die Zeit*, and *Spiegel*.

He has published more than 170 articles in English, French, Russian, Hungarian, and German on various topics, including health economics, the biological standard of living in historical perspective, demography, development, the industrial revolution, and agriculture.

He has received numerous research grants from the German National Science Foundation, the National Endowment for the Humanities, the Bavarian-French Educational Foundation, the European Union, the Marshall Fund, and the National Science Foundation, to name but a few.

He has generously donated his time, serving on the Nominating Committee and the Program Committee of the Social Science History Association, and the local arrangements committee for the Third World Congress of Cliometrics in Munich. He has been a member of the editorial board for *Annals of Human Biology*, the *European Review of Economic History*, the *Historical Social Research*, and the *Journal of European Economic History*, among others.

### Richard Sylla



Richard Sylla is Henry Kaufman Professor of the History of Financial Institutions and Markets and Professor of Economics at the Stern School of Business, New York University. He is also a Research Associate of the National Bureau of Economic Research and a Fellow of the American Academy of

Arts & Sciences. Prior to NYU he was Professor of Economics and Business at North Carolina State, a position he accepted after finishing his degree at Harvard, where he was a member of the famed Alexander Gerschenkron workshop. Among

his contemporaries were Deirdre (then Donald) McCloskey, Knick Harley, Peter Temin, Peter McClelland, Stefano Fenoaltea, and Richard Sutch. He has held visiting positions at the University of Pennsylvania, Harvard, and Oxford. Prior to beginning his doctoral studies, he spent a year studying at the Indian Statistical Institute in Calcutta as a Rotary scholar.

Professor Sylla's research focus is on the financial history of the United States in comparative contexts. He is one of the foremost scholars of American financial history and a fan and renowned scholar of Alexander Hamilton, who he credits for inventing what would later be credited to Walter Bagehot as the textbook behavior for a central bank during a crisis. He authored articles on Hamilton in *Biographies of the Financial World* and the *Handbook of Key Global Financial Markets, Institutions, and Infrastructure*. In 1970 the Economic History Association (EHA) awarded him the Cole Prize for best article in the *Journal of Economic History* for "Federal Policy, Banking Market Structure, and Capital Mobilization in the United States, 1863-1913."

He has offered his service on numerous committees at the university and professional level. He was elected Vice President of the Southern Economic Association (1982). He served as President of the Economic History Association (2000-01) and the Business History Conference (2005-06). He edited the *Journal of Economic History* from 1978-84, and at various times has been a trustee for the EHA, the Business History Conference (BHC), the Cliometric Society, and the Museum of American Finance.

He was named Fellow at the Charles Warren Center for Studies in American History at Harvard in 2003-04, and was appointed a member of the Federal Reserve System's Centennial Advisory Council in 2011. The BHC presented him their Lifetime Achievement Award in 2011. He has been awarded numerous research grants from the National Science Foundation, the Sloan Foundation, and the Kauffman Foundation. In 1994 his teaching prowess was recognized when he was presented with the Citibank Award for Excellence in Teaching at NYU. ■

## An Interview with Tony Wrigley, Part 2

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Edward Anthony Wrigley was born in 1931 in Manchester, England. He did his bachelor's and Ph.D. at the University of Cambridge, and he spent his academic career at that university, as well as at Oxford and the London School of Economics. Among numerous honors, he was president of the British Academy, has received honorary doctorates from seven universities, and was knighted (Knight Bachelor) for service to historical demography. Wrigley has published widely in economic history and demography journals, and he has written or edited more than a dozen books.

Following is the conclusion of the transcript of an interview with Professor Tony Wrigley, conducted by Timothy Guinnane, in Cambridge, England, on May 25, 2011. The interview was videotaped and is available in its entirety at <http://pantheon.yale.edu/~guinnane>. The first part of the transcript was published in Issue 2 of the 2011 Volume of this Newsletter. This transcript has been edited for brevity and clarity, and citations have been added to identify some scholars and their works. Thanks to Leigh Shaw-Taylor for making the video and for helping in numerous other ways.

I want to shift to interest which is both earlier and more recent, and then we'll come back to the connection to population. In your doctoral dissertation,[1] you stress the physical location of coal seams as an important part of the logic of the causal forces in the economic development in continental Europe. And at the same time, there is a strong theme about the work of national units not being terribly interesting, or not necessarily the right way to think about economic development, because this one coal seam straddles Germany, France and Belgium. How did you come upon that as sort of a research topic and general idea?

*It was an overambitious exercise, but the background to it was a belief that I'd acquired—I think, as an undergraduate—that the fact that economic history is an offshoot historically of political and constitutional history had been carried over into the assumption that the explanation of economic change links naturally to national units in the same way that political history clearly does. And I was looking for an opportunity to test whether ignoring national units in some ways produces a more coherent picture. The belt of coal fields you have mentioned stretches through three*

*countries. The traditional economic histories of each of those countries tended to explain the success of industry by the banking system or the excellence of technical education or some feature of national government activity. What I wanted to test was whether in fact what was similar about developments in these three coal field areas was more striking than the differences between them, and this was a convenient test bed. In fact, it was overambitious in all sorts of ways, but what it brought out very early to me was how difficult it is to do international work of that sort in that period, if only because the economic series that exist are extremely difficult to compare because they are compiled on a different basis. For example, I was very frustrated that coal price data – I've forgotten which is which – but in one of the countries that I was interested in there were pit-head prices and another there were market prices. The same sort of problems occurred when you were looking at occupational structure, and so on. Two of the things, however, which you can measure with a fairly clear degree of close similarity as to measurement, are the production of coal itself – a lump of coal is a lump of coal – and the population – a head is a head is a head. In going into the work I certainly didn't expect to make as much use of population data as I ended up doing, but it was *faute de mieux* in a sense, and then you begin to see that it has great interest of its own. What I'd originally intended to do and what came out of it were fairly strongly dissimilar, but you're right that what lay behind it was the conviction that at least some things are better understood if you don't stick with the national unit than if you do.*

Just a small follow-up question: Sidney Pollard pushed this idea fairly hard.[2] You must have talked to him. Do you think he over-stressed it, or did he stress it in a different way, do you think?

*He stressed it in a different way, I think. He was interested in the international aspect of it, but I think he was even more interested in the intra-national aspect of it. He was apt to stress how rapid industrial growth, for example, is localized within countries. But there is a strong similarity between our viewpoints, and I think he made fairly frequent cross-references to my work and vice versa. We were hammering at the same theme.*

You've just suggested that one of your reasons for

your early interest in population was just that the data were more obvious in some way. This takes us to a slim book that you wrote: *Continuity, Chance and Change*.<sup>[3]</sup> To my knowledge, this is the most well-known exposition of your idea of the difference between an organic economy and a mineral economy. So could you briefly explain the difference and then tell us a bit about how this came about.

*It's convenient, I think, to go back to a distinction that medieval philosophers made between the fungible and consumptible. A fungible is something like a field, the use of which in one year leaves it perfectly possible for you to return to it the next year. A consumptible is something like a slice of cake, which, if you eat it, is gone. My idea about organic economies stems from that. They are essentially fungible. They are dependable in the sense that, year after year, you have access to the same resources, but they are limited by the nature of those resources, and the nature that limits them is the process of photosynthesis.*

*Everything, all material production, involves using energy; in pre-industrial economies—organic economies—the limit is set by the process of photosynthesis since that is the basis of everything that the economy did. In the form of food and fodder, it provided mechanical energy. Plowing a field involves using oxen or horses which are fed by vegetation. Smelting iron or lead involves heat energy which you get from burning wood, and so on.*

*Elementary physics shows that the theoretical possible total amount of energy that a pre-industrial economy could make use of was very limited. It means that the kind of world in which we live today was, literally, physically impossible (as David Ricardo pointed out in his work). He ends a paragraph in which he summarizes the way in which agricultural limitations make prolonged exponential growth impossible by saying—and this is a physical fact—it's not to do with human institutions.*

*What happens in the industrial revolution is you switch to being a consumptible-based economy. You can gain access to the products of photosynthesis accumulated over many hundreds of millions of years in the form of coal or oil or natural gas, and that blows the top off the limits that had previously affected economies: but at a price. You are using something of which, it is true to say, every ton you dig out of the earth means that there is a ton less left.*

*So, post-industrial economies have the possibility of exponential growth and degrees of wealth that were previously unthinkable and were unthinkable to all the classical economists. But you do this at a price. Unless you can find some other way of gaining access to energy, you will eventually run out of cake and be forced back to where organic economies always were placed. This is why nuclear power, for example, is such an important but also such a tendentious issue. Despite the best efforts of the large companies that depend upon coal and oil, they can't go on sustaining economies indefinitely, and the more rapidly growth takes place, the more rapidly consumptibles disappear. If an economy like China is making 500 million tons of steel a year as they now are, you are approaching that point much more rapidly than would have been the case if you'd stuck with the relatively small amounts of steel that used once to be produced. In any case, it is simply physically impossible for every family to have a car or to build 100,000 ton ships and so on, if you are limited in the way that organic economies were limited. And the fundamental idea in *Continuity, Chance and Change*, though I didn't quite express it in that way at the time, was this idea.*

Now in your most recent book, there are very striking calculations I have quite enjoyed about how much land you would have to have to grow all the matter to create the energy to replace the products of the English coal fields. And, as you point out, it would be simply impossible. What strikes me about this is that Robert Allen has recently published a book stressing the unusual features of British coal fields as an explanation for the industrial revolution.<sup>[4]</sup> In your more recent book you couch what your efforts are slightly differently, but maybe it's worth just ruminating on how your argument about coal and the British Industrial Revolution differs from Allen's, if it does.

*I am not sure quite how to answer that question. I don't think that there's any conflict between what I say and what he says, but we approach it in a very different manner.*

*The essence of his story of the occurrence of the industrial revolution in this country is the combined effect of labor being expensive, which pushes you towards capital-intensive solutions to production problems, and coal being cheap, which makes it possible for you to make use of energy on a much greater scale. There's nothing in that that's in conflict, I think, with what I chose to highlight.*

*The point that I was most anxious to try to bring home is the idea that in considering the industrial revolution, we should pay at least as much attention to the question of why it didn't come to a halt as to the question of why it started up. In that context, it's the ability to gain access to what appeared to be unlimited quantities of energy in a new way that enables growth to continue. Otherwise, the arguments that the classical economists made would have continued to remain appropriate. Adam Smith said that there is an opportunity for considerable growth, and he was conscious of the nature of the growth as it occurred and why it occurred: by creating relatively large markets that enabled the division of function to take place by specialization. But the very process of growth, in effect, ensures that it must come to a halt. The end situation that he depicted would be worse than, or no better than, where you started out essentially because of this energy problem. He didn't express it in that form, but it exactly parallels the argument that I've made. It's one reason why I've always felt it's illuminating in considering what happened in England to be very conscious of what happened in the Netherlands, as indeed Adam Smith was. He had quite frequently said: if you want to know what the future holds for us, turn to consider what happens in the Netherlands. In the Netherlands, a man of good standing can borrow money at 2½ percent. In this country, in England, it's 3½ or 4, in France or Scotland it's 7 or 8 percent. What that reflects, he said, is the fact that the opportunity for profitable investment had largely been exhausted in Holland. They were investing in other countries, and that is what's going to happen elsewhere. The return you can get on capital is an indirect reflection of the opportunity for further growth, and as that peters out, the return that you can hope to get will decline to the point where investment tapers off and growth ceases.*

*Now again, following up on this and going back to the population questions, one of the things that one would expect after thinking about, especially, the more mechanical version of the Malthusian model, is that as an economy begins to exploit coal fields and have higher real wages and so forth, the demographic patterns would overwhelm economic growth. Another way you would reach this sort of unpleasant outcome (that economic growth didn't really lead to anything better for the population) would just be much earlier ages at marriage and higher fertility as a result. So what this highlights is the importance of not just these technological things such as coal but English demographic patterns in making economic growth*

*possible in the long run. How do you see those two fitting together? And could you ruminate on how people think about this more broadly today. Are they doing it justice?*

*I could talk at length about this. In a nutshell, I think it's entirely appropriate that John Hajnal's essay [5] is perhaps the most influential single statement or approach to the interplay of demographic behavior and economic circumstance that we've had in the post-war world, and his focus on the importance of a very different marriage system in parts of western Europe seems to me an essential part of the understanding of the backgrounds of the industrial revolution. It's linked to the fact that social convention meant that embarking upon marriage meant creating a new household, and, therefore, that there was an economic hurdle to be overcome to enable you to marry. It is very different from nearly all other societies, where on marriage you characteristically join an existing household and may eventually become head of it, but much later.*

*If the west European pattern exists, if those conventions prevail, then you make it likely that fertility will be sensitive to economic circumstances to a much greater degree than would be the case where, for women at any rate, marriage is universal and takes place at a very early age, soon after sexual maturity. It both means that it's quite likely that marriages won't be formed until a large part of the fertility life of the wife has been spent without bearing children and also that significant proportions of both sexes would never marry. And one of the things that I think proved demonstrable in the wake of the demographic work that was done on England was that in the early modern period, both aspects of marriage were sensitive to secular economic trends and helped to ensure that you don't have to live on the edge of what people always referred to as "the Malthusian precipice," though in fact Malthus, himself, in his later work was very sensitive to this issue and pointed out that it was possible to reach an equilibrium position in which real incomes were well above bare subsistence because of suitable marriage characteristics.*

*Where this pattern exists it's quite possible for a significant proportion of the population to get well beyond the point in which they have to spend all their income on the bare necessities of life, and, given the nature of income elasticities of demand, you therefore create the incentive to produce other goods in far greater quantities than where such goods are bought*

only by a tiny minority of the wealthy.

Now, it's true that if it continued to be the case that improving economic circumstances encouraged people to marry earlier and more universally (as happened in late 18<sup>th</sup> and early 19<sup>th</sup> century England), you can imagine a circumstance (as H.G. Wells did in one of his novels) in which the whole country gets carpeted with people. One of the unpredictable, but crucial, changes that occurred with increasing wealth was that people chose to have fewer children. Then age at marriage and whether or not people marry have less and less bearing on how many children they have, and you can well reach the point (as reached by many countries in Europe and now much more widely) where fertility is below replacement level. Thus population trends may be downwards, not upwards. Increasing standards of living, rather than producing burgeoning populations, may produce the opposite.

In the crucial period—in the run up to the industrial revolution—the sensitivity of fertility to economic circumstances may have been crucial in creating a degree of demand for products other than basic necessities, which encourages investment in a way that's much more difficult to achieve where a different demographic system exists.

Would it be fair to say that you think that understanding the industrial revolution and subsequent growth requires understanding of both what we think of as the economy and also population patterns?

Well, yes and no. I think it's absolutely demonstrable that access to energy in an unprecedented scale is a necessary, though perhaps not a sufficient, condition for an industrial revolution. Whether the kind of marriage system that existed in Western Europe was a necessary condition, I am not sure. I mean that might be pushing the argument too far, but it's at least very reasonable to believe that it was one of the circumstances that made the changes easier than they would have been if the sort of demography that was true of eastern Europe, for example, had also been the case in the west.

I have always been struck by the fact that in your work often you are talking about something, say the nature of the industrial revolution, but tend not to take a position on other ways of viewing the thing. Let me give you one example. A lot of economic historians stress Britain's constitutional arrangements in property rights and things like that as fundamentally

causal, maybe not sufficient, but certainly necessary. [6] To my knowledge, you don't really have anything to say about that. What underlies that style?

What underlies it is the problem of distinguishing between the chicken and the egg. I have no quarrel with the view that institutional change and enforceability of contracts (and all that sort of thing) is characteristic of this society and others in the transformations that occur. But if you look back on the Civil War, for example, and the evidence that showed of the huge influence of mercantile London, how can you know that it's the egg rather than the chicken, so to speak. Why not suppose that the institutional changes to which you refer are downstream from the power of the city of London rather than the reverse, or rather that there's a feedback between the institutional changes and what's happening in the economy? The belief that you can isolate something and say it's downstream from something else may be naïve. It's part of the scenario, so to speak, but to wish to set it to one side and treat it as the trigger for what happened? I'm very dubious about it.

This is interesting. So what I took as just reticence is actually a more critical posture.

No, it's more like indifference. I mean, well, I know this is a platitude: You can't conduct controlled experiments. You can't tell what would have happened if there had not been these changes, but these changes, and some of the other developments that have been highlighted, seem to me difficult to arrange in a causal sequence. The chicken and egg problem is prominent, and it's not given the prominence that it deserves.

Okay. So I just have one more question, which is really not so much about your work, it's about our field. Economic history has always been, I think, a slightly marginal field, not in an especially derogatory way. In the States it has been clinging to economics departments: maybe a version of it is coming back in history departments. In Britain there are all kinds of funding issues which may threaten many, many different fields. If a bright undergraduate from Cambridge University came to you and said he or she is interested in these issues, what kind of advice would you give? Is this a reasonable way to devote one's professional life? What kinds of things to study? Where to study? How to go about it? In other words, when you see the world unfolding, where do you see the next generation of scholars coming?



*I wish I could give either a clear-cut or an optimistic reply to that. Just, so to speak, as background, one of the things that's rather unusual about this university—Cambridge—is that there has never been a separate department of economic history as there were in a great many British universities, though virtually all of them have disappeared. But economic history has always been a plank in the Tripos and so undergraduates have the opportunity to be exposed to economic history automatically if they read history. One of the encouraging possibilities, which is quite new, is the far greater importance of the M.Phil., a one-year post-graduate degree which is now for most people a prerequisite for going on to do a Ph.D. That enables you, in principle, to begin to acquire techniques that you can't expect to acquire as an undergraduate. It may be one of the developments that helps to restore economic history as a viable possibility. If it is to flourish, it has to show that it really is important, and I suppose one of the reasons for the kind of work that I've been doing is that I consider that the distinction between an organic economy and the kind of economy we now have is fundamental to the understanding of history generally and not just to economic history; therefore, that economic history is a topic that history students in general should embark on with enthusiasm. I can't claim that they do now, but I hope it might happen in the future.*

Just one last question. George Monbiot, who I realize is sort of related to you, has a blurb on the back of your most recent book suggesting that your book has something to say about global warming.[7] What do you think it has to say about the problem of global warming?

*I think it must have something to say about it because an inescapable concomitant of gaining access to energy on a previously unprecedented scale is that it produces huge problems. And, as it turns out, many of those problems are long-term accumulative. There is always the background possibility of reaching a tipping point at which the degree of environmental change which has been triggered by the massive use of fossil fuels gets to a stage where, whatever we do, we face a very difficult and unpleasant future. One of the issues that these sorts of questions, I think, brings into prominence is an issue that Peter Laslett, for example, was much concerned about: inter-generational justice. [8] Are we justified in relaxing in the relative comfort of modern life if the penalty is going to be paid not by*

*us, but by our great-grandchildren. In my view, the fact that so much that's to do with global warming and other aspects of environmental change is uncertain ought to make people all the more determined to do something, and to do something quickly—precisely because no one knows how these changes may accumulate and whether there will prove to be a tipping point. So it is a moral issue which people are very unwilling to address in general. I don't think I've answered your question.*

Do you have anything else to add?

*Well you know that I sometimes refer to a Greek myth: The gods wish to punish someone individual, and they do so by putting in a jar, which was to be given as present, unimaginable forces that will be released when the jar was opened. It eventually was opened, but not by the man whom they hoped to punish—a very typically Greek twist to the story. And it released forces which were unimaginable to those at the time and of which they were unconscious, and it seemed to me that the industrial revolution had something very similar about it. Contemporaries were completely unconscious of it. If you said to a man in the street in the 1790s, "What's that revolution that's going on?" He would say, "Oh, it's the bloody French again!" If you said, "No, I am referring to your revolution," he'd have said, "What revolution?" And it wasn't just the man in the street. The best informed men—Smith, Ricardo—all simply did not believe that what was happening could happen. It was still true of John Stuart Mill. I think the first generation that saw it was really a big difference was the generation of Karl Marx. The moral indignation and fury that Marx displays in his writing stems from the fact that he said, "Yes, we have got what we now call exponential growth but all the benefit is going to a tiny minority." If you like, you can say the same prospect is beginning to surface again today. Well, you know better than I do, but I believe it true to say that the real income of the vast majority of people in the United States is roughly where it was in the 1970s. GNP has doubled but in a rather Marxian way, the benefits are being restricted to a tiny minority. All these are a range of issues that, making reference to the Greek myth, so to speak, can be highlighted, which is why I did so.*

Thank you very much.

## Notes:

[1] Published as *Industrial Growth and Population Change* (1961).

[2] Sidney Pollard (1925-1998) was an economic historian who held academic positions in both Britain and Germany. His *Peaceful conquest: the industrialization of Europe 1760-1970* (1981) stresses the idea mentioned above, that nation-states are not sensible units for the analysis of early industrialization.

[3] Part of the Ellen McArthur Lectures given biennially in Cambridge.

[4] Robert C. Allen, *The British Industrial Revolution in Global Perspective* (2009).

[5] John Hajnal (1924-2008), a British demographer, wrote two influential essays on the “western European marriage pattern.” The first was “European marriage patterns in perspective,” in *Population in History*, ed. D. V. Glass and D. E. C. Eversley. London (1965) the second, “Two Kinds of Preindustrial Household System,” appeared in *Population and Development Review* 1982

[6] For example, “Constitutions and Commitment: The Evolution of Institutions Governing

Public Choice in Seventeenth-Century England” by Douglass North and Barry Weingast *Journal of Economic History* 1989.

[7] George Monbiot is a British journalist. He writes a weekly column for the *Guardian* and is active in environmental efforts, including initiatives related to global warming. The blurb says, in part, “If you want to understand how our dependency on fossil fuels began and what we might do to escape it, you must read this book.”

[8] Peter Laslett (1915-2001) was an English historian. He and Wrigley co-founded the Cambridge Group for the History of Population and Social Structure. Laslett’s early research concerned the development of political theory, but he later turned to historical demography and especially the structure of historical households. Towards the end of his career he developed an interest in aging and the themes Wrigley notes above. These issues are discussed in *A Fresh Map of Life* (1989) and *Justice Between Age Groups and Generations* (co-edited with James Fishkin, 1992).

## Books by Tony (E.A) Wrigley:

*Industrial Growth and Population Change* (Cambridge 1961).

*Population and History* (London, 1969).

*The Population History of England 1541-1871* (London, 1981). With R.S. Schofield.

*People, Cities and Wealth* (Oxford, 1987).

*Continuity, Chance and Change* (Cambridge, 1988).

*English Population History from Family Reconstitution, 1580-1837* (Cambridge, 1997). With R.S. Davies, J.E. Oeppen, and R.S. Schofield.

*Poverty, Progress, and Population* (Cambridge, 2004).

*Energy and the Industrial Revolution* (Cambridge, 2009)

*The Early English Censuses* (Oxford, 2011). ■