The Newsletter of

The Cliometric Society

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Report on the Second EHES Congress

by Steve Broadberry, Warwick, and James Foreman-Peck, Oxford

(Venice) The Second Congress of the European Historical Economics Society was held on January 19 - 20, 1996, at Ca' Foscari, University of Venice. Participants enjoyed the sumptuous setting of the Ca' Dolfin, in the heart of Venice. Gianni Toniolo (Ca' Foscari, Venice) was the local organiser.

The conference opened with an invited lecture by Charles Feinstein (Oxford) on 'Economic Growth and the Standard of Living in Britain during the Industrial Revolution.' Noting that recent revisions of the British growth rate during the 18th and 19th centuries rely on indices of real output, Feinstein seeks to provide an independent, income-based estimate of GDP. His income side data tend to confirm the slow growth interpretation, with real wages growing even more slowly than Crafts' output-based figures. He also considers factors which might account for real wages having grown more slowly than *per capita* incomes, including redistribution from wage to non-wage incomes, and changes in terms of trade or labour force participation rates.

Conferees then moved to parallel sessions. On Friday morning participants could choose between sessions on pre-industrial economies and protection of domestic markets. The former, chaired by Piero Bolchini (Venice), began with a paper by Avner Offer (Oxford), who argues that the 'Great Transformation' from customary exchange to the impersonal market has stopped short of completion. Exchange, in the form of gifts reciprocated without certainty, continues to pervade modern society, driven by the pursuit of 'regard', the positive opinion of others. Personalisation of gifts authenticates the regard signal. Large-scale gift exchanges persist in family formation, in intergenerational transfers, in labour markets, the professions, marketing and crime. Although constrained by time and psychic energy, gift exchange is likely to survive as a preferred source of regard.

Toniolo suggested that Offer had conflated the market for regard and the preindustrial economy, two distinct topics. Persistence of the household economy was due simply to a shift in relative prices. Offer replied, assuming prices remain unchanged, everybody could swap unpaid housework for equivalent waged work next door, but they would not find it satisfactory. There is a division between the regard function and the wish to exclude strangers. The British upper classes are unusual in farming out their parental functions as well as the education of their children. Then Noel Whiteside (Bristol) and Toniolo exchanged remarks about freezer food. Joerg Baten (Munich) asked if Offer had extended his analysis to the early modern period, but he had not. Dan Anderson (Odense) commented on the resemblance to the mediaeval 'just price,' a remnant of which he was fortunate to notice in the unwillingness of garages to charge for minor repairs to his car. Foreman-Peck pointed out that

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What's Inside

Executive Director's Notes

New Trustees

Angela Redish (University of British Columbia) and John Wallis (University of Maryland) have been elected Trustees for 1996-2000. They replace Barry Eichengreen and Eugene White, whom we thank for their service to the Society for the past four years.

Eh.Net Organizational Meeting to be Held in Chicago

In the past several years the number and variety of electronic resources supported by The Cliometric Society has grown rapidly, including the Economic History Services fileserver and the 12 lists we sponsor. As this growth makes clear, the internet will become an increasingly important factor in future scholarly communication. The time has come to create an administrative structure to manage and guide the development of on-line resources for economic historians. Eh.Net is intended to be such an organization.

An *ad hoc* executive committee consisting of David Mitch, Joshua Rosenbloom, Robert Whaples, and Sam Williamson has been appointed in the last month. The Eh.Net executive committee and the editors of many of the Society-sponsored discussion lists will meet in Chicago the weekend of April 27-28 to formalize an organization to administer these electronic resources and to plan strategies for future development.

The agenda for the meeting includes sessions on: (1) the purposes, goals, and structure of Eh.Net, (2) technological and financial constraints and opportunities, (3) techniques for editing a successful list, (4) drafting a constitution for Eh.Net, (5) meeting with representatives of the electronic library world, and (6) defining possible new positions, such as Web Site Editor, Book Review Editor, Article Review Editor, Research Abstracts Editor, and Local Seminar Report Editor.

Volunteers will be needed to assist with a variety of Eh.net tasks. If you are interested in becoming a list editor or in filling one of the new editorial positions, please send me an e-mail message. More information will be posted on Eh.news.

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Economic History Services adds members

Two organizations recently have joined the EHS fileserver, the History of Economics Society and the Economic History Society of Australia and New Zealand, ('OZNZ Society'). Both societies have been running their own lists, which are now open to all interested subscribers and are archived in the server directory. (See page 8.)

All EHS member organizations are listed on the server main page, at the address **http://cs.muohio.edu/** A WWW browser such as Netscape allows you to view the home page with graphics, or in text only using the browser LYNX. EHS does not support gopher, a different technology. Anyone with gopher access should also have Lynx access. If you have trouble connecting to our server, please send a message to **help@cs.muohio edu**

New Color

How do you like our new paper? The change is due to a temporary shortage of our traditional color. Should we continue to publish on 'Sky' or return to 'Rose Vellum'? E-mail your vote to me at **swilliamson@cs.muohio.edu**

Report on Clio Sessions at ASSA 1996

by Robert Barde, UC-Berkeley, J. Bradford De Long, UC-Berkeley, Ann Fender, Gettysburg, and Philip Hoffman, Caltech

(San Francisco) The Cliometric Society sponsored four panels at the annual Allied Social Sciences Association meetings, January 6-8. The program was arranged by Phil Hoffman and John Nye (Washington U.).

The first session was gaveled to order at 7:58 am by Brad De Long. Although it was scheduled for an early-morning 'death slot' at a hotel five blocks away from the main ASSA events (the hotel did offer a 'Japanese breakfast' option – the Pacific Century has begun), about 30 people showed up, drawn by the fascinating topic, the history of financial markets. Discussion was lively despite the hour.

The first presentation, by Michael Haupert (Wisconsin-LaCrosse), began with the standard co-author's disclaimer: everything anyone finds obnoxious or wrong in the paper is the fault of his absent co-author, Howard Bodenhorn (Lafayette). He went on to summarize their argument about why American free banks did not issue more bank notes, that it soon became cheaper to have deposit rather than note liabilities – notes must be printed, they wear out, and they are subject to counterfeiting. It may have been easier to manage liabilities by having them take the form of book entries in a list of depositors than by having them circulate as bearer bank notes.

The discussant, Maria Cristina Marcuzzo (Rome), raised four issues. First, did local monopoly affect banks' decisions? She then asked for a more developed argument about why deposit liabilities were cheaper than note liabilities, and pointed out that note issue was chosen by managers, not shareholders. Finally, she suggested use of an explicit model to determine the optimum balance between note and deposit liabilities. From the audience, Joe Mason (Office of the Comptroller of the Currency) questioned Haupert's speculation that low note issue was a way of reassuring customers that the bank was sound, since note issue was easily manipulated and was thus not very informative. When viewed in the context of work by Calomiris and Hubbard, demand deposits were an effective disciplinary structure for free banks.

In the second presentation, James Lothian (Fordham) reported he finds little net increase in 'globalization' of international capital markets when comparing today with the period before World War I. The discussant, Lance Davis (Caltech), thought the topic and paper fascinating, but wondered about data problems. How can Lothian tell whether interest rates have converged when one can't really be sure what pre-World War I interest rates were? Does Lothian's use of cross-country averages hide much of the interesting variation in the data? And what happened in 1920, when the world economy fell apart and the linkages between international capital markets weakened? Alan Taylor (Northwestern) agreed that the inter-war period was very different, and that we need to know more about why. General discussion followed about the tightness of links between financial flows and real commodity flows of consumables and of capital.

Akira Motomura (Stonehill) presented the third paper, on how the 16th-century Spanish Monarchy's desperate search for more money to fight the wars of the Counter Reformation led its economy to stagger and stagnate. By contrast, the Dutch Republic won its war of independence against Spain without much disruption of growth in Dutch mercantile prosperity.

De Long then played the standard discussant's trick of placing the paper in the context of his own work, and gave an extended plug for one of his papers-in-progress. Wherever absolutist monarchies dedicated to conquest and war emerged in early modern Europe, he argued, economies stagnated – in the 18th century, Spain, France, Prussia, and even non-absolutist Holland found their economies severely damaged by the accumulated burdens of two centuries of staving off attempted conquest, first by Spanish and then by French absolutist monarchs. Only Britain managed to have a thriving economy while bearing the financial burden of being an early modern European great power.

Nye questioned Motomura's comparison of Holland with Spain, since they were so different in political organization. Perhaps Spain and France, or Holland and Britain, would provide easier and more informative comparisons. Lothian wondered about the critiques of 16th- and 17th-century Spanish public finance made by the Spanish

'School of Salamanca'. Hoffman then talked about the political deals that absolutist monarchs had to strike with the nobility in order to get their support to fund expensive wars with higher taxes on peasants and merchants. Tax exemptions for the nobility implied that absolutist monarchs were restricted to modes of taxation carrying extremely high excess burdens.

Gail Triner (Rutgers) gave the final paper, 'Banking on the Periphery: Brazil, 1906-1930'. Taylor, the discussant, lauded Triner for broadening the debate over finance and economic development and for amassing a very rich data set on Brazilian banking activity. He worried, though, that such long-run studies face tough challenges in use of time-series methods. Triner agreed with Taylor's concern that the time-series evidence presented in the paper was not so robust and compelling as one might like, and that there are also questions about the direction of causality. Taylor noted that Brazil, like others on the periphery, financed much investment by overseas borrowing, and that the London-oriented, gold-standard, global capital market collapsed in 1913, right in the middle of Triner's sample period. He wondered how Brazilian financial institutions had responded to these new accumulation and mobilization challenges, and thought a comparison with Argentina might be useful. Further discussion was cut short because the session overran its time slot.

The second panel, on the Political Economy of Institutions, was chaired by Hoffman. The opening paper, by Erik Craft (Richmond), summarizes his research on the benefits of early US weather bureau reports to Great Lakes shipping. After recounting his childhood fascination with Great Lakes shipwrecks, discussant Hoffman praised Craft for his wonderful piece of economic history and his creative use of evidence. Hoffman did worry, though, about the small sample size, and about lack of evidence concerning losses due to false storm reports. He suggested further research on the political economy of the origins of Signal Service Storm Warnings and on the public entrepreneurs who initiated it.

Pursuing this issue, Joseph Reid (George Mason) proposed examining the interest groups (shippers) and the opportunistic behavior of leaders (scientists) to understand the political outcomes. Craft responded with information on relevant inventions, the potential decline of the Army Signal Service after the Civil War, interest by a Milwaukee scientist in weather forecasting, and the funding implications of an 1866 fire at the Smithsonian Institution. Samuel Williamson (Miami) asked if weather reports became more reliable over time and why shippers didn't press for reinstatement of the forecasts after the financial scandal of 1883. Craft replied that weather forecasting technology did not change much and that the service was in fact reinstated in 1884. Randall Nielsen (Washington U.) asked why previous private weather services had failed, and Craft replied by stressing that the service was a public good.

Shawn Kantor (Arizona) next presented his continuing work with Price Fishback (Arizona) on the adoption of workers' compensation in the US. They argue that workers, insurance companies, and employers all benefited from the legislation and supported it. The Progressive political movement did not have much effect, except where state insurance funds were instituted. Given the benefits to all parties (except personal liability lawyers), Kantor and Fishback explore reasons why legislation had not been enacted prior to the 1910s, and conclude that changes in the liability climate affected the timing of legislation.

Discussant Reid voiced his approval of the paper, but stated some reservations. Although the authors dismiss Progressivism as the source of workers' compensation legislation, arguing that employers wanted to avoid increasingly expensive liability cases in the courts, the judges who heard these cases were nonetheless linked to the Progressives. Reid also considered curious the finding that non-unionized workers paid for workers' compensation insurance with compensating wage differentials, but that unionized workers did not. Most unions, he observed, lacked strength and did not generally support changes which reduced the relative attractiveness of membership.

Kantor responded that he and Fishback did not deny a relationship between courts and employer liability laws, but pointed to the confusion of state liability laws. He said that the power of unions, such as those in coal and rail, likely accounted for their not suffering from wage offsets. Reid nonetheless wondered about steel. Williamson observed from the audience that fatal accidents declined, while nonfatal accidents increased, and asked whether this resulted from better reporting or expansion of the more dangerous industries. He also wondered about the role of the safety movement. Kantor explained how they had determined that the more dangerous industries had expanded, offsetting the effects of the safety movement. Questioned about the use of 1923 insurance premiums to look at relative safety *circa* 1900, Kantor replied that they had also looked at 1905 premiums. In response to Williamson's query about native *versus* foreign-born workers, Kantor said that their tests had found no great difference. Robert Margo (Vanderbilt) and Kantor traded remarks about contagion effects from states which had previously introduced workers' compensation. Discussion followed about the extent of union compensation funds and also about problems of adverse selection in offering insurance.

In the session's third paper, Lynne Kiesling (William and Mary) hypothesized that workers' membership in cooperative societies in Victorian Britain provided insurance against income loss during trade downturns in cotton textile manufacturing. Her econometric results show that a 1% rise in cooperative membership led to a 0.27% decline in relief recipients, with a small negative effect on the able-bodied and a positive effect on the non able-bodied.

Discussants McCloskey and Olney with Va Nee Van Vleck.

Discussant Nielsen proposed tying the paper to literature on the growth of government. He found Kiesling's claim that public relief was used only as a last resort much stronger than what the paper actually showed. Noting that the co-movement of the able- and non able-bodied with a time lag doesn't necessarily demonstrate that public relief was a last resort, he asked how long a lag had been necessary to exhaust personal resources. He also asked what the econometric estimates relating relief recipients to cooperative membership showed, if wealthier persons also belonged to cooperatives.

Stephen Ziliak (Iowa) suggested that Kiesling could relate her work to the current debate about state-supported safety nets. Joan Hannon (St. Mary's) asked if non able-bodied includes women with children, to which Kiesling replied no. Hannon pointed out that co-op membership could be a measure of distance from family members. After some discussion about the role of private charity, Reid returned to Ziliak's concern about the entanglement of public and private relief, suggesting the cotton famine was a big reason for expansion of the public sector. Kiesling replied that she hadn't found much persistence of bureaucracies or private charities after 1866. Responding to Kantor, Kiesling said much labor hoarding had occurred, although employers were tapped out after 14 months. Finally, Richard Easterlin (USC) wondered about the general issue of private *versus* public response to crises. Kiesling replied that there was a fabric of non-governmental, non-market responses to crises, and that in her period formal and informal private charity had far outweighed government payments.

Kiesling's paper led naturally to the final paper of the session by Stephen Ziliak on private charity as a solution to the problem of dependence. Ziliak uses price theory and data from Indianapolis to examine how abolition of public outdoor relief in the late 19th century had 'crowded in' private charity, and how that in turn had influenced dependence. He concludes that if private charity compensates for the abolition of poor relief, then abolition cannot simultaneously eliminate dependence.

Discussant Hannon was skeptical that a dollar reduction in public charity really had been accompanied by a dollar increase in private charity; it appeared to her that there had been only a 70% replacement. Furthermore, in her work on Kings County (New York) she had found almost no such crowding-in. She doubted the reported jump in private charity in Indianapolis between 1885 and 1890. In reply, Ziliak stressed that in the late 1880s a number of specialized charitable institutions had re-emerged. Hannon then observed that labor supply was affected by the probability of receiving benefits. Easterlin was curious why the middle and upper classes would support private charities if they accepted dependence theory, and asked what other demands, such as public health, were being made upon local government. Ziliak noted that there had been a revival of interest among the middle classes in charitable giving for a directed purpose, suggesting that private and public charity may have been different goods. Kiesling added that crowding-in and -out affected the supply of assistance, positing that private and public charity were not identical on the demand side.

Presenters Susan Carter, Richard Sutch, and Joshua Rosenbloom.

The third panel, chaired by Samuel Williamson, brought new data to bear upon issues of long-run change. Susan Carter (UC-Riverside) and Richard Sutch (UC-Berkeley) presented new estimates of trends in labor force participation of three segments of American society during a period of intense industrialization: youth, women of all ages, and older men. The basis for their estimates is a reinterpretation of the starting points for modern trends – the Census figures of 1870 and, especially, 1880 – based on an analysis of discrepancies between the published figures and those from the enumerators' sheets contained in the new Public Use Micro Sample of the 1880 Census. Carter and Sutch conclude that Census Director Francis Walker had 'secretly' authorized editing of the preliminary tabulations so they might conform to his *a priori* expectations, with the effect of reducing the reported participation rates for these three groups.

Discussant Robert Whaples (Wake Forest) pointed out that Walker's 'editing' had been neither frivolous nor malicious, and that he can be faulted only for not having documented his reasons for editing the results. Whaples described Walker's systematic, purposeful use of theory as a basis for massaging data as being in the best tradition of Cliometrics. Easterlin observed that among demographers it had long been known that the enumeration of women and children was highly deficient and that there was still disagreement over the classification of the labor force participation of older men.

In the second paper, Gregory Clark (UC-Davis) attacked three propositions about the political economy of growth which he attributed to Douglass North and Barry Weingast: that secure and stable property rights are sufficient for economic growth, that establishing such rights depends on a representative democracy, and that the political regime following the Glorious Revolution of 1688 caused the Industrial Revolution. He examines interest rates for both government debt (often 'forced loans' made under threat of expropriation) and in private credit markets over two and a half centuries, finding no statistically significant correlation between major political events and fluctuations in the private credit markets. He concludes that secure capital markets had long existed in England without producing economic growth, and that capital markets essentially had ignored political uncertainty and changes of regime.

Discussant Nye characterized the North-Weingast thesis differently, that growth in this period was the product of a long evolutionary process with the only sharp change after 1688 being in government credit. Given the lack of integration of various domestic capital markets, Nye viewed the transactions, wills, and land sales recorded in the Charity Commission reports as poor proxies for the full range of private capital markets. Deirdre McCloskey (Iowa) doubted that English capital markets really had been isolated internationally, as Clark claimed, and Jan DeVries (UC-Berkeley) added that by 1715, with the end of the wars in Holland, capital markets in northwestern Europe had become truly internationalized. Clark questioned the role of government borrowing in fostering English economic growth, stressing that it financed a

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EHA/AHA Roundtable Wrap-Up: 'The Future of Economic History'

by Judith A. Miller, Emory University

(Atlanta) At the January 1996 meetings of the American Historical Association, an overflow audience of almost 50 historians attended a session on 'The Future of Economic History.' The Roundtable, sponsored by the Economic History Association, was one of several attempts by the Association to address the issue of attracting more historians to economic history. The panelists, John Coatsworth (Harvard), AHA President, Naomi Lamoreaux (Brown), T.J.A. Le Goff (York), Robert Duplessis (Swarthmore) and Michael Bernstein (UC-San Diego), were charged by convener Judith Miller to reflect broadly on the field's problems and potential.

Each panelist noted a number of tensions driving the two fields apart. Some of the most important are methodological, such as the turn in economics toward theory and away from application. Thus, economic history, defined as an applied field, has found itself under attack in economics departments. At the same time, historians have been attracted to cultural and linguistic models, and have become skeptical of the kinds of causality they believe are at the heart of economics. Moreover, as mathematical models have increasingly dominated economic history, historians feel less equipped to include such work in their scholarship and teaching. These methodological and theoretical differences (along with the ways in which they shape the publication, grant, and tenure processes) pose difficult barriers to genuine scholarly exchange. The decline can be seen, Duplessis illustrated, in advertisements in *Perspectives*, the bulletin of the AHA. Of the 399 positions posted in 1995, only 15 mentioned economic history, and only five listed it as a first priority (generally as 'social and economic history'). Broader problems for the field lie in the less historical orientation of North American society and its college students, and in their hostility to models that rely on broad social or economic forces.

The panelists did not, however, condemn the field to the 'Rustbelt of History.' Several several saw signs that economic history continues to inform both economic and historical work. Coatsworth pointed out that recent Nobel Prize winners have worked on the institutional and social contexts of economic activities. Moreover, for many regions, such as Latin America, economic issues retain their importance. Likewise, Le Goff explained, French history continues its strong tradition in rural and demographic studies, despite the numerous paradigms that have prevailed.

Nonetheless, all agreed on a need to rejuvenate economic history and reconnect it to the concerns of historians. Tackling the problem of the apparent intellectual tensions between economics and history, Lamoreaux argued that economic historians are 'uniquely positioned' to recapture their fields and that the theoretical concerns of historians and economists are closer than one might suspect. She drew striking parallels between the historians' 'linguistic turn' and the questions that underlie the new economics of industrial organization and the economics of information. All are concerned with the imperfectly rational motivations of decision-makers, the scarcity and fallibility of knowledge, representations of that knowledge, and with how humans struggle to create institutions to cope with uncertainty. She urged the audience to see the possibilities in those shared preoccupations. Bernstein and Coatsworth also pushed historians to seek out colleagues in economics departments, to undertake genuinely interdisciplinary projects, and to take an active role in making recent economic scholarship accessible to their history colleagues and students.

The need to address more economic material in the classroom was a subject of great concern. Bernstein pressed economists to reaffirm the importance of history in their teaching, and to encourage economics graduate students to learn languages, undertake archival research, and to become more open to historical work and explanations. Likewise, he advised historians to develop a greater commitment to historical and empirical precision. Lamoreaux pointed out that only three basic undergraduate courses in economics (introduction, microeconomics and macroeconomics) are needed for historians to 'get going' in economic history, and when compared with the training in linguistic theory that many graduate students undertake, economics requires no greater commitment.

Duplessis turned to college teaching. 'Undergraduates want gripping stories,' he argued, but economic historians have failed them and the larger public. Scholars need to practice popularization, and to find ways to bring economic issues into general courses. An important means, he suggested, would be a series of brief books on specific issues that could be easily worked into undergraduate courses.

When the panelists had finished, the standing-room-only audience offered its reactions. Many expressed frustration with departmental boundaries and with what they perceive to be little interest among economists in finding common issues for discussion or research. One suggestion was that certain fields, the history of technology for example, offer greater chances for interdisciplinary work. Bernstein and Lamoreaux, noting that universities increasingly see interdisciplinary work as a way to meet multiple needs, urged historians to raise the concerns about departmental boundaries or resistance with their deans or as part of broader academic discussions at their institutions.

The audience expressed great interest in further training and in including economic work in their classes. Duplessis's suggestion of brief texts treating economic issues was immediately taken up, and there were several calls for anthologies of articles to introduce students and faculty members alike to the field. Reading and discussion groups were also suggested as a forum for cross-disciplinary exchange. Even though the Roundtable ran over its time limit, many historians stayed after for informal discussion.

As the Roundtable's convener, I would like economic historians to consider how to go forward. The Breakfast for Historians, organized by Ed Perkins (USC) at the September 1995 EHA meetings, also drew a large crowd. Subsequently, discussion has raised the possibility of developing a short summer program for historians, or of sponsoring sessions (or even a pre-conference) at the annual meetings of the EHA, AHA and other associations. Many historians at the Roundtable believe a series of short texts or anthologies would be marketable. It is exciting to find such a great desire to bring economic matters back to the historical agenda among those at the AHA/EHA Roundtable.

Eh.net Lists

Eh.news Economic History News
Eh.disc Economic History Discussion
Eh.res Economic History Research
Eh.macro Macroeconomic History
Eh.student A List for Students and Instructors of Economic History
Eh.teach Issues in Teaching Economic History
H-Business Teaching and Research in Business History
Quanhist.recurrent Comparative Analysis of Recurrent Phenomena
Databases Design and Management of Historical Databases
Global.change Economic History Dimensions of Global Change
Eh.eastbloc Economic History of the Eastern Bloc Countries
Oznz.society Economic History Society of Australia and New Zealand

New List

HES (History of Economics Society) was created in 1995 as the mailing list for members of that organization. In January 1996, it became part of the Eh.net group of lists, and is now an 'open list'.

The list welcomes all scholars and others interested in the history of economics or the history of economic thought. HES is devoted to discussion of the work of particular economists, groups of economists, sources and historical methods; requests for information; conference announcements; and questions regarding teaching of the history of economics. The editor is Ross B. Emmett, Augustana University College.

For expanded descriptions of all **Eh.net** lists, send the message *info lists* to **lists@cs.muohio.edu**

Report on the NBER/DAE Summer Institute

by Joseph Ferrie, Northwestern, and Paul Rhode, North Carolina

(Cambridge, Mass.) NBER's Development of the American Economy Program met at the NBER offices July 10th through 13th for its Summer Institute. The program was organized by Stan Engerman (Rochester) and Joseph Ferrie with the assistance of Kirsten Foss Davis and NBER's Conference Office. About 40 economic historians from across the country attended the annual conference. Presentations included work in progress and reports on long-term projects by Research Associates and Research Fellows of the Bureau plus summaries of recent doctoral dissertations in American Economic History.

The morning session began with a paper by Matthew Slaughter (Dartmouth), 'The Ante-Bellum Transportation Revolution and Factor Price Convergence', examining the impact of canal and railroad development on factor price convergence in the ante-bellum US. Others have looked at internal labor migration as a source of labor market integration, but less attention has been devoted to factor price convergence as a cause of regional labor market integration. Using price data from Cole and wage data from Goldin and Margo, Slaughter finds convergence in commodity prices but not in wages. He suggests that differences across regions in endowments and technology prevented factor price convergence.

The paper provoked a more lively response than the opening paper of the Summer Institute program usually elicits. The initial questions dealt with Slaughter's conceptualization of factor price convergence. Robert Gallman (North Carolina) asked whether the prices used were real or nominal, and whether convergence might occur through relative or absolute price changes. He suggested that appropriately-weighted price indices might reveal more convergence than individual commodity prices. Michael Haines (Colgate) suggested that trade across regions (leading to commodity price convergence) might precede the movement of labor (producing wage convergence). Lawrence Katz (Harvard) emphasized the need to distinguish between traded and non-traded goods, while Claudia Goldin (Harvard) noted the effects of canals and railroads varied by commodity. The audience then turned to the details of Slaughter's analysis and to possible extensions, Joshua Rosenbloom (Kansas) suggested an examination of the inter-regional market for slaves and its relationship to cotton prices. Sukkoo Kim (Washington U.) asked whether the commodity data (from four cities) and the wage data (from US Army forts) lined up well enough to make comparisons meaningful. Richard Sylla (NYU) asked whether the results could be reconciled with recent research on capital market integration. Haines noted that three of the cities in Cole's sample had ample access to ocean shipping, so canal and rail transportation might have been less relevant, and suggested a focus on the New York and Cincinnati markets.

Dora Costa (MIT), in 'The Rise of the Leisured Class: The Growth in Recreation Since 1888', uses a series of consumer expenditure surveys to document changes in how Americans spend their leisure time and money. Leisure has become less of a luxury since the 1880s, which has important implications for changes in labor force participation rates among older workers. She suggests that 'innovations in recreational activities are not just the outcome of the fall in labor supply, but are causes of the fall as well.'

Comments initially focused on the representativeness of some of Costa's samples and whether they are sufficiently comparable to reveal the long-term trends she claimed to find. Daniel Raff (Pennsylvania) questioned the procedure used to collect the 1888-90 and 1917-19 Consumer Expenditure Surveys, which focused on manufacturing workers, and Haines discussed some peculiarities of the latter sample. John Wallis (Maryland) observed that half the families in the 1936 survey earned less than $1,000, while other samples had larger income differences. Katz suggested that a breakdown of non-leisure expenditures (other than food and shelter) would be helpful. Rebecca Menes (Harvard) recommended re-weighting the data to adjust for changes in ethnic composition, while Naomi Lamoreaux (Brown) wondered whether shifts in the age distribution might explain much of the change. Others suggested looking at a consistent set of leisure goods over time, but Kenneth Sokoloff (UCLA) pointed out that this would miss much of the story: the shift to new leisure goods such as auto travel. Alternative interpretations of the results were then suggested. Katz urged a look at the 'privatization' of leisure activities that had once been undertaken communally. Alternatively, Haines thought the outcome might be due to increasing consumption of market leisure (*e.g.*, greater expenditures on alcohol and tobacco) and decreasing consumption of non-market leisure (with less time devoted to activities like meals and 'visiting'). Robert Margo (Vanderbilt) wondered whether there might not have been more egalitarian consumption of 'high-brow' culture as leisure before the contemporary period. Finally, Eugene White (Rutgers) and Sokoloff both suggested that Costa pay greater attention to the impact of falling transport costs on the mix of leisure activities.

The last presentation of the morning was Daniel Raff's joint work with Amy Bertin (The Economic Resource Group) and Tim Bresnahan (Stanford) on 'Locational Competition and the Aggregation of Plant-Level Increasing Returns: Blast Furnaces, 1929-1935.' They employ data for a sample of blast furnace operations from the manuscript schedules of the Censuses of Manufactures for 1929, 1931, 1933, and 1935 to determine the circumstances under which aggregation is permissible, and find that plant-level production relationships can be aggregated for blast furnaces despite substantial inter-plant heterogeneity. They attribute this surprising result to the poor substitutability of one plant's output for another.

Initial questions focused on the premise that there were increasing returns at the plant level. Goldin asked how we know this to be true. Menes asked whether there was a cost of shutting the plant down when demand was weak; Raff responded that a shut down could cause the brick lining to crack and require reconstruction. Haines wanted to know whether any changes in technology might be infecting the results, but Raff responded that the only innovations in this period were in process management. Haines also asked how many plants were fully integrated, since such integration is important for Raff's explanation.

A series of questions then addressed the specifics of Raff's estimating procedure. Goldin asked how we should interpret the plant-level dummies: do they mean that plants with a large number of furnaces had higher productivity? Raff suggested that the dummies capture vintage effects. Wallis asked whether the measured changes in labor productivity were illusory, for example, if workers were moved off the production line and kept elsewhere within the firm until demand conditions improved. Rosenbloom asked how much improved productivity could be explained by human capital accumulation. Finally, Gary Libecap (Arizona) asked whether the Depression-era industrial codes may have influenced the results, but Lamoreaux pointed out that such an effect would have occurred after 1933.

Following lunch, Joseph Mason (Office of the Comptroller of the Currency) presented dissertation work on 'The Determinants and Effects of Reconstruction Finance Corporation Assistance to Banks During the Great Depression.' Was the RFC successful in reducing bank failures? Using a panel data set of Illinois banks between 1932 and 1936, Mason fit models exploring how the RFC made assistance decisions and how assistance affected the rate and timing of failure. The RFC offered two types of assistance: loans with claims senior to those of depositors and, beginning in March 1933, purchases of preferred stock junior to depositor's claims. Regression analysis reveals that, while the junior assistance probably helped prevent failures, negative coefficients on the senior assistance variables suggest the banks were harmed. Mason then systematically explores econometric techniques (including bivariate regression to jointly model the bank's health and the assistance process, non-linearities in the impacts of assistance, and problems of omitted variables) to test whether the negative coefficient is spurious. Adjustments make the coefficient insignificantly different from zero at best, and more negative at worst. Mason then offers conjectural evidence based on the movement of stock market prices that the senior loans required excessive collateral and, hence, plausibly harmed the banks involved.

Wallis expressed concern that the regressions did not properly control for the initial health of the banks, noting that troubled banks would be the first to apply. Sylla questioned whether the omitted variable problem (*i.e.*, the RFC could see something we now can't) could be ignored. Raff followed up with a comment that Mason's approach modeled bank decisions rather than those of the RFC. White wondered how rules regarding the disclosure of which banks were borrowers affected the failure rates, but Mason replied that publicity had no discernible effect once the nuances of the timing of disclosure were understood.

The first day ended with Price Fishback (Arizona) summarizing the results of his long-term research project with Shawn Kantor (Arizona) on the adoption of laws concerning 'Workman's Compensation.' They argue the political battles of the 1900s and 1910s were not about whether to make reforms – the common law system's uncertainty and high legal costs were widely viewed as undesirable – but over the specifics. These included the extent and level of coverage, the option of pursuing a court suit, and whether the program was privately or state-run. They find the increases in workman's compensation payments were generally not redistributive and the reforms benefited all parties except trial lawyers. What caused the change to occur in the 1900s and 1910s? There is some evidence of an occupational shift to riskier industries, and of rising power of unions and state labor bureaus, but Fishback emphasizes the changing interpretation of liability laws, increasing uncertainty, and the rising number of cases going to trial. By the 1900s, many national employers' organizations and unions were urging reform. In regression analysis of the timing of state adoption decisions, prior voting patterns and industrial variables typically have the predicted effects.

Lee Craig (North Carolina State) asked for an explanation of the rise of the state labor bureaus. Goldin wondered whether the large firms pushed the changes to hurt the fringe and also how well the regression analysis captured the delays due to debates over the bills' details. Margo suggested using a failure time model and adding neighbor effects in the regressions. Lamoreaux asked about the influence of labor unions and employers who transcended state borders.

The morning session of July 11 began with Jeremy Atack (Vanderbilt) presenting preliminary results from his research with Fred Bateman (Georgia) on the origins and growth of corporations, 'Changing Organization of Business during the 19th Century: Evidence from the Census of Manufacturers.' Corporations are now characterized by limited liability, perpetual life, and transferability of interests. Atack notes this was not always so and traces the evolution of incorporation laws. In their study, Atack and Bateman examine the manuscript census of manufacturing for 1850, 1860, and 1870 and use a firm's name to categorize its organizational form. They find that, in the East and Midwest, the relative number of corporations and partnerships rose between 1850 and 1870, while the fraction of sole proprietorships fell. In the South, the fraction of partnerships also rose and sole proprietorships fell, but there was little change in the importance of corporations. The Pacific presented the real surprise – the fraction of proprietorships rose over the 1850-70 period.

Much of the discussion focused on the operation of early incorporation laws. Lamoreaux noted that the use of special charters continued through the 1840s. Raff and Gallman wondered why the early acts constrained the lines of operation, and Margo asked why the state intervened at all. Atack noted the states levied taxes on corporations, and Lamoreaux emphasized that corporations were traditionally viewed as privileged special interests and that the restrictions acted as a local anti-trust policy. Margaret Levenstein (Michigan) asked how the laws affected information flows to stockholders. A general discussion involving Sylla, Wallis, and Fishback was concerned with whether the movement toward general incorporation laws was part of Jacksonian democracy. Lamoreaux summarized the consensus; political 'outsiders,' rather than solely Jackson Democrats, pushed for general incorporation laws. Ferrie noted that there appeared to be problems with geographic consistency in the 1870 data, and Lance Davis (Caltech) suggested that the authors seek out the worksheets of Evans' classic NBER book on incorporation.

In his paper, 'Ethnicity, Wealth, and Urban School Attendance in the Mid-Nineteenth Century: The Case of Boston', David Galenson (Chicago) examines the common school reform movement, exploring in particular how the native-run public school system responded to large inflows of ethnic minorities, especially Irish Catholics. Analyzing microdata on school attendance patterns of Boston boys from the 1860 census, Galenson finds that children of poor, working-class, foreign-born families were less likely to go to school than those of wealthier, white-collar, native-born families. Specifically, he finds that the decline of attendance rates of immigrant boys in the teenage years was differentially rapid. In addition to family background variables, neighborhood effects appear to have been important. Galenson concludes by noting that the failure of Boston's common schools to realize their ideals resulted in an intense debate about segregation of schools along religious and nativity lines.

The paper generated much stimulating commentary. Christopher Hanes (Pennsylvania) asked whether a comparison with the experience of German immigrants in Philadelphia and New York might help sort out the effects of nationality and religion. Goldin noted that the percent attending school was higher than the percent finishing and asked whether there were more detailed school reports that could shed light on this issue. Costa asked about the effect of distance to school, and Hanes wondered about other dimensions of access, such as formal *versus* informal restrictions on attendance at a particular school. Levenstein asked whether the relatively higher attendance rates of pre-teenage Irish boys might be interpreted as a 'success story.' Michael Edelstein (Queens) inquired what 'non-attendance' meant. Menes asked whether economic opportunity (jobs) or exclusion by the elite better explained the pattern of attendance falling with age and suggested adding a measure of child employment by ward.

In the last morning paper, 'The Decline of Non-Competing Groups: The Premium to Education, 1890 to 1940,' Claudia Goldin and Lawrence Katz examine long-run changes in the educational earnings premium and related movements in office *vs.* manufacturing wages. In the 1890s, when clerical work typically required a high school education, office workers earned twice what manufacturing workers earned. Even as typewriters, calculators, and other office equipment spread by 1910, the wage premium remained relatively unchanged. By the early 1920s, however, with the spread of additional machinery and the increasing employment of women, the premium fell to about 1.5. This decline in the office premium is as large as the recent rise in the educational premium. Immigration, education, and technical changes all play key roles, and the outcome is the reverse of movements today. Goldin and Katz argue that the main change was the rising share of high school graduates, which increased from 5-10% of the school-age population in 1895 to about 30-35% in 1925. Even though the relative demand for educated workers tended to rise (except possibly in the 1910s), the increase in supply was much more rapid, resulting in declining wage differentials during the 1910s. While skill differentials within manufacturing also fell during World War I, the pattern was reversed in the 1920s. Goldin and Katz find the educational differential did not return to its pre-war level. The immigration cutoff explains relatively little of the rising supply of more highly educated labor relative to less-educated labor; the 'high school movement' was 10 times more important.

In the ensuing discussion, Rosenbloom asked if the technical changes were exogenous and wondered if wage movements were the same in all regions. Hanes inquired whether sectoral shifts accounted for much of the rise in the clerical share and asked how closely the clerical-manufacturing differential matched the high school wage premium. Raff asked about changes in managerial compensation. Haines wanted the story linked to movements to rationalize work in the 1920s and 1930s. Others wondered if European data would reveal a similar pattern.

Chulhee Lee (Chicago) presented his dissertation research on 'Socioeconomic Background, Disease, and Mortality among Union Army Recruits.' The study uses a data set for 45 companies in Ohio derived from linking military service records to the 1860 Census. Lee examines the pattern of specific diseases and the timing of mortality, including seasoning effects. He finds that farmers and rural residents were twice as likely as non-farmers to have suffered from disease mortality during their service. Wealth had a mixed effect – positively related to non-nutritional diseases and negatively related to nutritional diseases. Apparently, people moving from relatively isolated environments were more likely to suffer disease, a finding which has important implications for the closing gap between urban and rural mortality in the 19th century.

Gallman observed that diagnoses were often mistaken during this period, and Goldin questioned Lee's approach of separating soldiers suffering from wounds and from disease. Atack suggested using the population density of the place of origin instead of a binary urban/rural variable. Mason asked if the company history made a difference, and Lee replied it had little predictive power. Haines remarked that isolated farm life preserved frail people. Margo wanted controls for the prior disease history of the region of origin, while Thomas Weiss (Kansas) wanted to adjust for household size. Craig noted that farmers typically held lower ranks and suggested controlling for the soldier's rank and duty.

Day two ended with a discussion of Joe Ferrie's long-term research project, 'Ante-bellum Economic Mobility.' His presentation focused on the creation of his matched data set and two applications: investigating internal migration and comparing immigrant's economic performance during 1850-60 and 1965-70. In the sample, males over 10 in 1850 are linked from the 1850 PUMS to the 1860 manuscript using the 1860 index. Of an initial draw of 54,161 names, 29,523 are excluded because the names were highly common; of the remainder, 5,630 are linked. Ferrie examines the possible sources of linkage failure and judges the 31% rate reasonable. There are some differences (by age, region, and occupation) between the sample and the general population. Wealth holdings in the sample are lower and more unequally distributed than those reported by Soltow and Steckel, presumably because of age differences. Ferrie then compares his results on persistence rates with earlier studies which did not correct for mortality or absence from the Census. Ferrie finds higher persistence rates (47%) than reported in most community-based studies (40%). He also finds that the directions of movement of migrants compares well with the aggregate census figures. Ferrie then examines the Turner Thesis, emphasizing the movement of common labor to the frontier, and finds more support than many previous studies; urban unskilled labor appears more likely to have moved than most other groups.

In the discussion, Atack and Rhode inquired about the linkage procedures. Ferrie explained his algorithm and noted the entries were flagged when judgment calls were made. Gallman and Katz suggested Ferrie attempt to make his sample as consistent as possible with other wealth samples in the comparisons.

The third day opened with Robert Margo reporting on work with T. Aldrich Finegan (Vanderbilt), 'Changes in the Distribution of Wages: The Federal Government and the Private Sector, 1940 to 1960.' They analyze changes of wages within and between the Federal government and the private sector, especially during the 'great compression' of the 1940s. They note that, in recent years, the Federal government's wage structure has been more rigid and compressed than in the private sector, with government workers at the top earning less and those at the bottom earning more than their private sector counterparts. Based on an examination of non-postal federal workers and private sector workers in the 1940-60 public use micro samples, Margo and Finegan conclude that, in 1940, the earnings of public workers were as dispersed as, and on average higher than, comparable workers in the private sector. The 1940s witnessed wage compression and a falling pay premium in Federal employment. This is a result of specific pay legislation such as the 1948 Federal Employees Act which authorized a uniform $330 increase in salaries.

Much of the discussion focused on how the government designed its compensation schemes, and, in particular, Sokoloff noted pay at the upper levels was constrained by Congressional salaries. Katz suggested the use of variance decomposition techniques. Wallis suggested including workers in defense projects; Goldin wanted postal workers included; and Lamoreaux asked for greater attention to benefit payments.

Mike Haines offered his paper with Avery Guest (Washington), 'Fertility and Marriage in the Era of the American Civil War: Evidence from New York State, 1865,' which investigates the demographic transition in New York to illuminate America's unusual demographic experience. Their research uses a 5% sample from seven counties in the 1865 state census, which includes valuable information on birth parity, marriage, and childlessness. They find unambiguous direct evidence of a fertility decline (as reflected in child/women ratios) despite early and extensive marriage. The average age of women at first marriage was 23.7, lower than in Europe. In the New York data, holding women's background variables constant, birth parity declines with age.

Goldin began discussion by asking about the effects of differential migration. Sokoloff wondered why fertility was higher in urban areas. Hanes asked how representative New York state was; Haines replied that it generally reflected conditions in the Midwest and Northeast. Costa asked for more information about the women's background variables. Goldin then inquired about the underlying process of information spread, which might appear in midwive's diaries, *etc.* Haines said that the contrast between birth spacing (which required more information) and stopping behavior might be enlightening.

The morning concluded with Michael Bordo and Hugh Rockoff (both of Rutgers) presenting 'A Comparison of the Stability and Efficiency of the Canadian and American Banking Systems, 1870-1925', an extension of their earlier work with Angela Redish (UBC) that showed Canadian banking (which was more concentrated than US banking) suffered fewer failures than US banks in the 1930s. In the current paper, also written with Redish, the question is whether the oligopoly structure harmed the long-run development of the Canadian economy. They find that loan rates were very similar to the US, and deposit rates were actually higher. Hence, Canada's stability did not come at a cost to its banking customers. The net return on equity to Canadian banks was also higher because of higher debt/equity ratios. Examining the period before the 1900 banking merger wave, they find deposit losses were very small, less than 1% at maximum, compared with 0.3% for US national banks and 1% for state banks.

During the question period, Hanes asked about the role of suspensions and bank runs in Canada before 1900 and wanted more information on note, deposit, and currency ratios. Haines and Margo also wanted econometric controls for differential shocks in the US and Canada; Rockoff replied that the shocks had been similar. White asked whether the ratio of losses to loans is the right measure. Rosenbloom asked about the distributional effects of deposit losses. Lamoreaux wondered about the developmental implications of the banking structure with centralized headquarters and banks in local economies and whether bureaucratic rules had limited diversification. Fishback, Sylla, and White compared the

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Announcement

The Second Annual Cliometric Society Undergraduate Economic History Paper Prize

The goals of this award are to provide undergraduate students with an opportunity to achieve recognition for excellence in research and writing, to enable their work to reach a wider audience, and to encourage economic history teachers to cultivate undergraduate writing and research.

Selection Committee members Ann Carlos (Colorado-Boulder), Chair, Robert Whaples (Wake Forest) and Paul Hohenberg (RPI) will judge papers on significance of findings, soundness of method, originality, understanding of existing body of work, clarity of writing, and overall quality. The prize will be announced in the summer of 1996. The prize-winning paper will be published in *The Newsletter of The Cliometric Society*, and its author will receive a cash award and a complimentary membership for one year.

Rules:

Papers must be nominated by a member of The Cliometric Society.

All types of papers will be accepted, *e.g.*, archival research, statistical analysis, analysis and review of literature. Papers may cover any geographic area and any topic, as long as the primary focus is economic history.

Papers must be written by a student who was an undergraduate during the 1995-96 academic year. 'Undergraduates' are defined as students in the first degree program of their higher education, *e.g.*, US Bachelor's Degree. There are no age restrictions.

Papers must be submitted by e-mail or on disk, using a commercial word-processing program. They must be *one* document, with graphs, charts, tables, *etc.*, embedded in the text. Maximum length is 5,000 words, with an additional maximum of 5 pages of graphics. Papers must be in English.

Author's name and address, nominating instructor, institution, and course title must appear only at the beginning of the document.

Papers must be received by **June 30, 1996**.

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*Submission of a paper is a grant permitting The Cliometric Society to publish the work in the Society's **Newsletter** and in the Economic History Services fileserver. Runners-up may be invited to submit abstracts of their papers for publication.*

Call for Papers
World Congress of Cliometrics

The Third World Congress of Cliometrics will be held July 10 – 13, 1997 in Munich, Germany. All members of sponsoring organizations are invited to attend. Registration will be conducted in advance so participants can receive the papers prior to the Congress. The sessions will be conducted in traditional Cliometrics Conference format: authors will provide a five-minute introduction to their work, which will be followed by an extended period of discussion involving session participants.

Steering Committee Representatives and sponsoring organizations are

Leonid Borodkin, Center for Economic History and Theory, Moscow State University
Knick Harley, Canadian Conference in Economic History
Timothy Hatton, The Cliometric Society
John Komlos, Host and Local Arrangements
Graeme Snooks, Economic History Society of Australia and New Zealand
Gianni Toniolo, European Historical Economics Society
Yasukichi Yasuba, Japanese Quantitative Economic History Group
Samuel H. Williamson, Chair

Authors interested in presenting papers should send three copies of a two-to-five page proposal to the address below, or submit their proposals *via* e-mail. If sending a complete paper, please include a short proposal as well. At least one author must be a member of one of the sponsoring organizations.

Relevant Dates:

Deadline for proposals:	**October 1, 1996**
Authors notified of acceptance:	**December 1, 1996**
Requests for invitations due:	**March 1, 1997**
Complete papers due:	**April 1, 1997**
Conference books mailed:	**May 15, 1997**

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EHES Congress Report *(continued from page 1)*

the debate over Douglass North's early representations of feudalism as an exchange of services highlighted the potential coercion in such non-market relations. Offer agreed that gift exchanges were not necessarily benign, depending on the distribution of prior endowments. Gifts that must be reciprocated with interest will destroy the weaker party.

Paolo Malanima (Calabria) rounded off the pre-industrial session with a paper estimating energy consumption in Europe around 1800, which came from firewood (50%) and a little coal (primarily in Britain), water and wind (1%), draught animals (35%) and men (14%). Malanima estimates that energy inputs averaged 14,350 calories per day per man, but for delivered energy, firewood dropped to one-quarter, wind and water rose to 35%, animals fell to 10% and men accounted for 20%. The useful total was only one-fifth of the input calorie value. Between 1800 and 1989 energy use efficiency doubled; useful energy rose by 14 times. China gained most energy inputs from men and animals, and in 1800 consumed one-third the rate of Europe. North America by contrast used double Europe's calories.

Carlo Bardini (Ca' Foscari, Venice) questioned the logic of an energy balance in which calories used to produce food were deducted. Malanima explained that food, like manure, was a partial transformation of energy, and would otherwise be double-counted. Patrick O'Brien (IHR, London) asked about the relation between economics and energy accounting. Offer identified two influences on differential energy demand in northern Europe, climate and stature. Birgitte Andersen (Reading) commented that the shift from coal to oil must have affected efficiency. Malanima agreed: the 19th century was a period of greater energy inputs, with little increase in efficiency, but the 20th century, especially after 1950, saw massive improvements, as technological changes would lead one to expect. Toniolo observed that, on Malanima's figures, China's energy use was rather more efficient than Europe's, perhaps because firewood was scarcer in China than in Europe and was therefore used more carefully.

Peter Solar (Brussels) began the session on protection, chaired by Vera Zamagni (Bologna), by reporting on joint work with Jan-Luiten van Zanden (Utrecht). They attempt to quantify the effects of the Corn Laws on Britain and Ireland, by comparison with the experience of the Netherlands. They dispute an earlier attempt by Jeffrey Williamson (Harvard) to evaluate the effects of the Corn Laws on the United Kingdom without treating Ireland and Britain separately, but conceptual difficulties and practical problems with CGE modeling had precluded the presentation of new results at this stage. They suggest that Williamson was wrong to treat Britain as a small country in the world market for food, and to see grain as being afforded higher protection than meat.

O'Brien doubted whether modeling Ireland separately would alter Williamson's conclusion that the Corn Laws had only a small economic effect on the UK as a whole. He felt that introducing Ireland just muddied the waters, a proposition which, despite his ethnic origin, he felt could be generalised to all aspects of British history. Tim Hatton (Essex) stressed that the key parameter in Williamson's exercise was the price elasticity of demand for British manufactured exports, which Solar and van Zanden do not investigate. Williamson defended his distinction between grain and meat, since meat imports from Ireland to Britain faced a zero tariff. Solar replied that it all depended on whether the basic model is for the UK or GB. Richard Griffiths (Leiden) questioned the reliability of the Dutch data, and Solar promised to seek clarification from his co-author.

After lunch, parallel sessions were held on growth issues and on economic policies between the two World Wars. The session on growth, chaired by Nick Crafts (LSE), included a paper by John Komlos (Munich), describing how, in the late 18th century, just as the 'classical phase' of the Industrial Revolution was underway, average heights began to decline in all four European countries studied so far: Sweden, the Habsburg monarchy, Bavaria and the United Kingdom. A North American decline became apparent two generations later. Komlos draws on economic theory to explain a fall in food consumption despite an increase in income per head – the relative price of food rose, income was redistributed and market integration raised relative food prices for the former subsistence farmer. Urbanisation raised the delivered price of food and lowered delivered quality. Deterioration of the disease environment is an insufficient explanation because some groups – German aristocrats, the American middle class and US male slaves – were not affected.

The first paper of the interwar session, chaired by Isabel Cassiers (UCL, Louvain), was by Albrecht Ritschl

(Pompeu Fabra, Barcelona), who examines linkages between Germany's policy responses to the reparations problem and her macroeconomic performance between the wars. Using a simple model of sovereign debt with limited contract enforcement, he argues that transfer protection in the Dawes Plan induced Germany to overborrow, and that when the Young Plan removed the seniority of commercial debt service over reparations payments, Germany was exposed to credit contraction and deflationary budget policies even before the beginning of the international Great Depression.

Pierre Sicsic (Banque de France) sought clarification on the extent to which Germany ended up in a bad state because of policy choice rather than negative shocks, and also questioned the paper's emphasis on over-borrowing for consumption rather than investment. Ritschl argued that policy was more important, and that his model permits over-borrowing both for investment and consumption. Roberto di Quirico (Fucecchio) asked how much of German borrowing could be explained by a normal pattern of postwar reconstruction and was told that this accounted for only a part of the borrowing of the early 1920s. Broadberry and Toniolo both questioned the assumption that the German government could be treated as a single agent acting rationally, rather than as a set of conflicting interests, but Sicsic responded that there were technical limits to the number of agents that could be modeled. Jonas Llungberg (Lund) enquired about the value of German debt after the moratorium, and in the discussion that followed, Rainer Fremdling (Groningen) noted that Germany had resumed payments on part of it as recently as 1990.

Pierre-Cyrille Hautcoeur (ENS and Delta, Paris) and Pierre Sicsic then presented new estimates of medium term (five-year) French interest rates, taking into account that the ratio of coupon to price cannot be used as the rate of return on government bonds when there was a redemption option. Comparing returns on public and private instruments in France and in Britain, they conclude that high French interest rates in the mid 1920s can be explained by the threat of a capital levy rather than fear of government default, and that low French interest rates during 1928-31 reflect anticipation of an appreciation of the franc against sterling. Similarly, high French interest rates after 1931 can be explained by an expected depreciation of the franc.

Toniolo was worried by the large interest rate differentials on similar instruments in Britain and France, which Hautcoeur and Sicsic explained by differences in possible redemption dates. Llungberg and Broadberry both questioned the treatment of inflation expectations, with the medium-term rate of return calculations depending on a long-term interest rate assumed nominally constant. The authors defended their approach by arguing that agents expected any inflationary disturbance to be over within five years, when the assumed long term rate of interest became relevant. Hatton focused on the assumption that a 20% capital levy was expected with certainty, particularly since the levy was never imposed; Sicsic offered an alternative interpretation of a higher capital levy with probability less than one.

The rest of Friday afternoon was taken up with parallel sessions at which dissertation research was presented. The session chaired by Foreman-Peck opened with a presentation by Ola Grytten (NSE, Bergen-Sandviken) on his thesis which reconstructs and explains Norwegian interwar unemployment in international perspective. Official statistics based on union data record an average 20.5% unemployment between 1920 and 1939, whereas Grytten's new series averages 7.3%. Exchange rate overvaluation raised unemployment in the 1920s, while nominal wage inertia drove up real wages as prices fell in the world depression. Unemployment was classified into four types, with natural-rate unemployment averaging only 1%. Rick Garside (Birmingham) asked about the relative impact of demand deficiency and shocks affecting real wages on the one hand, and the role of rigid real wages on the other. Whiteside enquired about work-sharing and under-employment. Grytten noted that many workers returned to the land or went fishing for long periods. Foreman-Peck asked if there was a role for the dole. Grytten replied that trade unions were the only source of unemployment benefit and agreed that benefits might have contributed to unemployment in the unionised sector.

Michael Kopsidis (Muenster) then presented his analysis of the impact of market integration on Westphalian agriculture between 1780 and 1880, using Prussian land tax records. Smallholdings of 10-50 hectares proved responsive to the pull of the Ruhr market in two phases: 1810-30 during the creation of a single Rhineland-Westphalian grain market and in the 1840s and 1850s when railways both reduced price fluctuations and increased regional divergence. Fremdling observed that, in contrast to Kopsidis's findings, his own earlier work showed that there was no change in the coefficient of variation of grain prices between the 1820s and 1860s in 60 Prussian cities. Kopsidis pointed out that the difference could be explained by distinguishing between the unification of prices and the reduction of price volatility, since railways affected only the latter. In response to another question, Kopsidis elaborated that growth of animal products output was higher than for grain, especially in areas supplying the Ruhr.

In presenting the final dissertation of this session, Lars Svensson (Lund) explained the remarkable reduction of the female-male blue-collar wage differential in Swedish manufacturing between 1913 and 1990, from 42 to only 11%. Whereas the literature emphasises the role of politics (in particular the wage solidarity policies of blue-collar unions), Svensson maintains that the principal determinant was industry-specific wage change, demonstrating this proposition in a demand-supply framework using the Mincer-Caine model of female labour supply. The 1971 reduction in the marginal tax rate on secondary worker participation was particularly important. Niels Kaergaard (Danish Royal Agricultural University) remarked that the increase in the level of taxation since 1913 must have raised the marginal tax rate and made wage work less attractive, and Grytten suggested that gender distinctions must have mattered less over time, thus closing the gender gap. Apparently, that was not so. Svensson responded that the Swedish labour market was very segmented. Offer asked about a marriage bar. There was one until 1939 but it was irrelevant in blue-collar trades. Whiteside enquired about the impact of public sector expansion of demand for female employees in the 1940s. This was accounted for by sector demand, Svensson replied; from around 1960 the change in the product mix of the public sector affected the labour force, with attempts at rationalisation and contracting out.

Caroline Fohlin (Caltech) opened the session chaired by Toniolo. Her dissertation looks at how investment was affected by universal banking in Germany and Italy from unification to World War I. Her German study indicates that the policies of the credit banks shifted sometime around 1900, with attachments to individual firms becoming much more prevalent thereafter. Changing liquidity sensitivity of investment at about this time suggests that firm-bank relationships, though uncommon in the 19th century, were more important in facilitating investment during this period than in the ensuing years. The findings of her Italian study parallel those for Germany, providing evidence in favor of a dynamic theory of financial intermediation, but also suggesting a conservative interpretation of the role of such institutions in industrial development. Ritschl thought that the tax reform of the 1890s, which created incentives favouring internal finance might be more important than any changes in bank behaviour. Hartmut Kiehling (Munich) asked about the importance of industrialists to banks and vice versa. Renato Giannetti (Florence) questioned the Italian sources, evoking an indignant response from Zamagni, who asked, 'Aren't Italian data to be believed?'

Pierre-Cyrille Hautcoeur then presented his dissertation research on the Stock Exchange and the financing of French firms from 1890 to 1939. Using firm-level data and techniques from modern finance theory, he concludes that the French capital market during this period was efficient in a static sense (allowing for the effects of information asymmetries and taxation) and partially imperfect in a dynamic framework. Fohlin, impressed by Ritschl's comment about the importance of taxation, repeated it to Hautcoeur; he replied that there had been no taxation before the war, but high taxation on returns to both debt and equity afterwards. Mark Spoerer (Hohenheim) enquired about the choice between market and nominal values of shares. Kiehling wondered about the importance of inflation after World War I, but Hautcoeur said that the data were better geared to answering micro than macro questions.

Mark Spoerer's dissertation questions the long-held belief that the Nazi regime was hostile to profits. Based on balance sheet data, a new series of profit rates was presented which show low profits during the Weimar years and high profits during the Nazi period. Spoerer interprets this result as supporting Borchardt's profit-squeeze thesis for the 1920s, contradicting Temin's argument that the Nazis relied on the stick rather than the carrot. Solar and Williamson thought the high profit rates recorded in the sample might be due to greater variability of returns, particularly since a number of firms exited, but Spoerer stated there were in fact very few exits, and these were for reasons of financial expediency rather than bankruptcy. Jaime Reis (EUI, Florence) and Fohlin questioned the large differences between reported and actual profits. Brian A'Hearn (Munich) thought that if the Nazis had needed to obtain the support of important technocrats, allowing high profit rates was a rather inefficient way of doing so. Spoerer replied that more transparent methods of rewarding technocrats would not have been acceptable to the German people. Komlos argued there were sticks as well as carrots (he had concentration camps in mind), although Spoerer insisted they were not important before the siege of Leningrad. Pedro Lains (Lisbon) wished to see how profits performed in other countries, and when Spoerer obligingly produced figures for the US, Britain and France, Marc Flandreau (CNRS, Paris) thought that the Soviet Union would be a better comparison because it was a planned economy and also employed sticks. However, he conceded that finding profits data for the Soviet Union might be a bit tricky. Ritschl brought the lively session to a close, pointing out that there were also carrots in the Soviet Union, an observation which would surely have been appreciated by the Mullah had he been present.

The first Saturday morning sessions were on business history and the European periphery. Reis chaired the business history session, which opened with a paper by Birgitte Andersen and John Cantwell (Reading). They examine US patent awards to the 284 largest US and European industrial businesses since 1890, showing that diffusion of innovations to sector followers was associated with an especially high rate of patenting in that sector. During such phases of fast growth, however, leaders were able to preserve at least some of their leading positions.

Zamagni enquired about differences in national propensities to patent in the US. Cantwell responded that the US tended to be more precocious in electrical equipment and the Europeans, the Germans in particular, were more active in chemicals. Foreman-Peck asked whether the competitive use of blocking patents might produce misleading indices of technological leadership. Cantwell replied that their index of specialisation was concerned with the composition of a firm's patent activity, not total patenting, and so should not be vulnerable to this problem. Kiehling enquired why leaders had not lost leadership and was told that leadership was in areas reflecting broad competences, rather than specialized products or markets. O'Brien observed that no distinction had been drawn between product and process innovations.

Wendy Asbeek Brusse (Groningen) and Richard Griffiths then delivered their paper, which argues that the extent of European cartels and of government support for them during the late 1940s and 1950s has not been adequately appreciated. Despite US pressure, European cartels were integral parts of postwar business-government cooperation to maximise output. In 1949 there were 340 formal Dutch cartels with contractual agreements. International cartels in chemicals engaged in surveillance and blacklisting. Legislation was ineffective.

Reis suggested that unemployment in the 1930s had created a climate of opinion in which competition was difficult to justify, but by the 1950s prosperity began to change opinion about cartels. Griffiths replied that cyclical explanations for cartels were incorrect; accounting for competition was the problem. Fremdling remarked that there was no contradiction between competition and cartels -- in Germany cartels competed with investment and fixed prices, and when quotas were renegotiated, the larger investors were rewarded. Cantwell contrasted the rhetoric of the European Commission and the policy of national governments. In response, Griffiths pointed out that even the EC, which requires registration of agreements, allowed them to continue until the end of the 1960s. The real pressure on cartels came from German companies at the end of the 1950s; they were impatient at the constraints negotiated earlier with British firms. End-user companies began to react against unnecessarily high input costs.

The final business history paper, by Ingrid Henriksen (Copenhagen), describes how Danish agricultural specialisation shifted towards animal products in the last quarter of the 19th century and how the steam-driven cream separator was introduced. At prevailing farm sizes, some 50 farms were necessary to keep a creamery fully utilised. Co-operative creameries proved more successful than private dairies because, with seven to 10 year contracts, they bound suppliers to deliver all their milk to them. Co-ops were less common in Ireland because costs of co-operation were higher.

Responding to a question from Cantwell about a vertical integration solution, Henriksen noted that cheating was considered worse among co-op members. As a former dairy worker, Offer remarked that the lock-out problem was more serious for the farmer than for the creamery. Quality control was a simple matter for a creamery. Henriksen pointed out that measuring technology was not well developed until the 1890s, but co-ops took off in the 1880s. O'Brien pursued the comparison between the Danes and the Irish, asking whether the inability of the Irish to co-operate stemmed from solidarity which precluded expulsion of members from co-ops. Offer offered

O'Rourke's authority (in his absence) for the greater propensity of the Irish to ride free. Peter Scholliers (Brussels) asked whether Danish state support contributed to the success of the co-ops, but was told that no state interest was shown until the 1930s; the co-ops were not even registered.

Broadberry chaired the session on the periphery, which opened with a joint paper by Kevin O'Rourke (UC, Dublin) and Jeffrey Williamson, who claim that on average, the poor European periphery converged on the rich industrial core in the four or five decades prior to World War I. Their data show that the three Scandinavian economies used industrialisation to achieve spectacular convergence with the leaders, especially in real wages and living standards. Some, like Ireland, seem to have done it without industrialisation; others, like Italy, underwent less spectacular catch-up; yet others, like Iberia, actually fell back. The paper offered a tentative assessment of the roles of trade policy, emigration, capital flows and schooling, concluding that globalisation was by far the dominant force leading to convergence and divergence around the periphery.

Gunnar Persson (Copenhagen) questioned the reliability of the real wage data, which show Spain above the European average in 1870 and the Scandinavian countries at the bottom of the table. The authors responded that although successive refinements of the data have reduced the extent of convergence, it was inconceivable that it would be removed completely. Sicsic worried that Scandinavian levels of schooling had been well above Iberian levels long before the catching-up process began. Williamson argued that it was an empirical question whether levels or rates of change mattered. Barry Eichengreen (UC-Berkeley) objected to the implicit model of exogenous technological progress, but the authors were prepared to defend this assumption for analysing relative performance, even if endogenous technical progress had been important for individual growth rates. Giovanni Federico (Pisa) wanted to know what was happening in different sectors, and Baten urged a regional breakdown within countries. The authors were sympathetic, but pled lack of data. Llungberg objected to the claim that many Swedes thought education accounted for Scandinavian catching-up; he could only think of Lars Sandberg, who is Swedish-American anyway. Williamson was forced to reformulate the argument in terms of 'many Swedish-Americans.'

Sevket Pamuk (Istanbul) introduced his paper on changing forms of deficit finance in the Ottoman Empire with the suggestion that he was talking about the 'periphery of the periphery'; Ritschl reminded him that it had once been the 'core of the core.' Pamuk identifies an important change in the way budget deficits were financed before and after the 1850s, with reliance on internal borrowing accompanied by regular debasements in the earlier period, and a switch to external borrowing from the mid 19th century. However, since this switch had occurred without instituting fiscal discipline, European creditors established financial control over Ottoman finances after the moratorium of 1875. O'Rourke wondered whether monetary instability had produced real effects, since it was always possible for people to trade in other currencies. Pamuk accepted that the use of other currencies could have mitigated the effects of Ottoman monetary instability to some extent, particularly when gold and silver coins were circulating. Komlos thought that loss of territory might have increased the burden of debt for the Ottoman Empire, and Pamuk agreed. Federico and Williamson asked whether submitting to foreign creditors was superior to the Italian strategy of default, given findings in the sovereign debt literature that all debtor countries pay a risk premium when there is a default, but individual countries do not seem to be adequately penalised.

The session was completed with a paper by Brian A'Hearn on regional concentration in the Italian cotton industry in the 19th century. After carefully sifting the evidence for significant human capital externalities, transport cost differences, technological spillovers, labour market pooling and access to specialised inputs, A'Hearn concludes that external effects do not explain the concentration of Italy's cotton industry. He does find that externalities affecting local attitudes toward mill work may have raised productivity, but argues that this effect is better explained by literacy and, in any case, was offset by higher wages prevailing in provinces where the industry was concentrated.

In the ensuing lively debate, O'Rourke, Williamson and Solar all insisted that recent economic geography literature shows that small effects can explain even the most extreme regional concentration. Feinstein thought that the Lancashire cotton industry might be useful in seeing whether big external effects could ever be identified. Tommy Bengtsson (Lund) thought most of the growing concentration resulted from redistribution within the Northern Regions rather than from a North-South divergence. Although A'Hearn agreed there was an interesting North-North story, he thought it was secondary to the North-South story. Federico wanted to distinguish between decisions of northern millowners not to migrate south and decisions of southern entrepreneurs not to invest in cotton. Toniolo felt that the south had been given a bad press; if an enterprise in the south collapsed, most people concluded that the failure was the result of the enterprise being in the south, whereas he thought that the south had failed because of the enterprises located there!

After lunch there was a short business meeting at which the officers of the EHES were elected and the new journal, the *European Review of Economic History*, was launched. Although one participant thought the title a bit conservative, everybody seemed happy with editor Tim Hatton's description of the graphics as 'restrained yet distinctive'.

The Congress concluded with parallel sessions on the classical gold standard and Europe's labour markets and on issues of convergence. The former was chaired by Eichengreen, and began with a paper by Agustin Llona Rodriguez (Carlos III°, Madrid), who argues that the periphery was subject to more serious shocks than larger economies because of specialisation in a small number of primary products. For example, about 70% of Chile's exports consisted of one commodity. Coefficients of variation for the terms of trade between 1845 and 1913 were higher in the peripheral economies selected. The components of the real exchange rate were not cointegrated under the gold standard, but were cointegrated when currencies were inconvertible and adjustment was easier.

France experienced a regime change from almost free trade to protection in 1890, Ritschl argued; the purchasing power parity result, therefore, may stem from a trend break, and it would be desirable to include a dummy for 1890. Reis thought that political factors were different in the core than the periphery, with civil and external wars rather than terms of trade driving the contingent rule. Rodriguez agreed, excepting Chile, which left gold in 1878 before the war of 1879. Reis also raised the issue of the large subsistence sector in the periphery, which he thought would enhance inflexibility in the non-traded goods sector. Rodriguez responded that what mattered was that quantities would have adjusted rather than prices. Eichengreen remarked that for small countries the ratio of traded to non-traded prices was an exogenous variable, so there would be no tendency for the terms of trade to be mean-reverting, but that tells us nothing about price flexibility. Rodriguez said the domestic wholesale prices he used were not necessarily determined by world prices, offering Chilean wheat as an example.

In his study of London-Paris exchange rates between 1848 and 1870, Marc Flandreau showed that both the position and the spread of bullion points between mono-metallic and bi-metallic nations reacted endogenously to shocks on international gold and silver markets. The distance between upper and lower specie points tended to shrink when large disequilibria occurred on world bullion markets and to expand when these disequilibria receded. Bullion point changes, as well as exchange rate movements, triggered specie flows in and out of France, stabilising initial imbalances.

Ritschl noted a tradition that emphasises greater credibility for the metal in which taxes were payable. Reis commented on the similarity of transport costs for silver and gold, *contra* Portugal-England arbitrage where costs were related to weight, and pointed to an apparent violation of the specie points. Flandreau replied that the term 'violation' was inappropriate because the estimates were small. A statistical interpretation is preferable. O'Rourke asked how much the bi-metallist reduction in monetary autonomy mattered relative to gold points. Sicsic noted the gold points themselves were very close and left little scope for interest rate autonomy. Lains enquired about the relative merits of gold and bi-metallic standards. Flandreau responded that he wants to shift the debate away from questions of stability and 'did it work?' towards the shrinkage of the bullion points that put pressure on the bi-metallic nation. Eichengreen suggested including interest rate series to check the prediction about sub-periods when variances should differ.

In the final paper, Noel Whiteside analyses contrasting forms of state intervention in Britain and France and the impact of state involvement on job security, working conventions and wage bargaining between 1930 and 1960. While salaried employment in France was transformed, it was not in Britain. She concludes that contrasting outcomes reflect the different systems of intervention through the law, and the structure and nature of public ownership, and reveal the different expectations of government in France and Britain.

Eichengreen remarked that Whiteside was claiming a more complete and successful restructuring of labour relations in France because of greater participation by the state; measuring by labour productivity, however, they look no more successful than in Britain to the end of the 1950s. Whiteside responded that employment itself was transformed by regularisation. Dan Anderson asserted that class struggle in the British case was not apparent to the historian working from the archives, which present a planner's view. France (and Denmark) remained more absolutist than democratic Britain. Whiteside agreed that she was describing successful labour resistance in Britain stemming from labour shortage. Crafts suggested that British governments had little bargaining power because of international payment problems at the end of the war, requiring controls for the monetary overhang and informal social agreements which precluded reforms. Whiteside said she focuses on the NHS precisely because she believes a lack of investment and the manufacturing sector were not the key. There was a tension between Beveridge, who regarded short-time working as lost production, and the trade unions, who pressed for employment security. Toniolo asked whether Whiteside saw an intellectual long cycle in Europe outside Britain from the 1930s to the 1960s in which the culture of the engineer dominated that of the market and the economist. Svensson suggested that Swedish comparisons would give yet another combination of the three factors Whiteside had considered for France and Britain; the strength of trade unions, the independence of the state and the state's willingness to intervene in labour relations. Swedish trade unions opted for a modernisation strategy in the 1920s, triggering a sustained growth of productivity for many years thereafter.

The convergence session was chaired by Bart van Ark (Groningen) and opened with a paper by Carlo Bardini, who uses benchmark estimates with time series extrapolation to measure Italy-UK labour productivity differences in the 20th century, arguing that, in contrast to the experience of some other countries, catching-up had occurred at roughly the same pace in manufacturing and the whole economy. He also estimates the importance of structural change to Italian catching-up during two periods: structural change was responsible for most catching-up during 1911-36, but very little during 1936-51.

Feinstein and Broadberry were concerned by the procedure used to deflate value added in each sector, and urged Bardini to use individual price series rather than a single aggregate, and to ensure that imported raw materials prices were excluded. Broadberry and van Ark noted that the structural change effects reported do not take account of the 'quality shift' to sectors with high levels, as well as high growth rates, of value added per worker.

Jonas Llungberg then gave a paper on 'European Market Integration and the Behaviour of Prices, 1850-1914.' Rejecting the cointegration approach as lacking in transparency, Llungberg calculates trends and deviations from trends in price series, concluding that simple purchasing power parity can be rejected. His interpretation of price movements in the markets for butter, iron and steel and machinery is that prices certainly converged over periods of decades, but that equilibrium was never attained due to institutional, structural and technological changes which shifted the competitive positions of countries. Evidence also exists to show long swings in Swedish relative prices.

Fremdling opened discussion by arguing that if, as Llungberg claimed, quality differences were big enough to rule out comparisons of price levels between countries, then they probably also create problems for interpreting changes over time. However, Llungberg's detailed description of the care he had put into obtaining price quotations for goods of equal quality had convinced Fremdling to turn the question round and ask why Llungberg had not carried out his analysis on levels! Van Ark wondered if the conclusions were broadly consistent with Williamson's findings on globalisation and convergence. Federico thought that cointegration analysis had been rejected too quickly, while Broadberry thought that the results might be strengthened by applying tests from the recent literature on stochastic trends.

The final paper in the convergence session was presented by Elena Lobanova (Moscow) on the dynamics of concentration of production in Russia before World War I. Avoiding use of standard concentration ratios, which cover only the largest firms, Lobanova derives new measures of concentration in Russian industry, using the Gini Index and the 'method of grouping,' examining the shares of small, medium, large and very large enterprises, defined by levels of output. She finds that concentration increased continuously from 1879 to World War I, although the rate of increase slowed from about 1900. Concentration of output grew faster than concentration of employment, and concentration grew in most sectors and in most regions.

Cantwell and Broadberry enquired why other measures of concentration (such as the Herfindahl Index) had not been used. O'Brien probed the significance of the findings in the context of Gerschenkron's analysis of economic backwardness and Lenin's analysis of monopoly capitalism. Feinstein sought clarification on whether the concentration measures referred to enterprises or plants. It was plants. Van Ark asked if the more rapid growth of concentration of output than of employment could be pressed further to make inferences about his 'hobby' of productivity measurement.

A highlight of the conference was the splendid dinner on Friday evening rounded off with the Presidential Address by Gunnar Persson, and the presentation of the dissertation award. Persson was worried lest he acquire a reputation like that of Graziano in *The Merchant of Venice*, of whom it was said, 'Graziano speaks an infinite deal of nothing, more than any man in Venice.' In fact, the speech, setting out future directions for the EHES as well as describing recent achievements, served as a showcase for the President's literary knowledge and general erudition. James Foreman-Peck commended the dissertation presenters for their high standards, and awarded the Gino Luzzatto Prize to Caroline Fohlin for the best dissertation in European economic history.

ASSA report *(continued from page 6)*

massive armaments program rather than infrastructural improvements. Finally, North himself (Washington U.) encouraged Clark and others to continue asking provocative questions about established orthodoxies.

In the third paper, Richard Easterlin asked whether economic growth has caused the doubling of life expectancy at birth that has taken place over the past century. His answer was a resounding 'No', based largely on two observations; first, that much economic growth took place in England before there was any noticeable increase in life expectancy, and, second, that much of the recent reduction in mortality has occurred in areas of no economic growth, with the gap between developed and undeveloped countries in life expectancy narrowing even as the income gap has widened. Easterlin attributed the widespread decline in mortality to major breakthroughs in public health and in the technology of disease control, factors that owed much to developments in science and little to demands associated with the market.

According to discussant McCloskey, Easterlin has joined the camp of economic historians who are skeptical of any link between science and economic growth before this century. She also noted that Easterlin's emphasis on internationalization of medical innovation through direct borrowing parallels the story of development as a trans-national process. McCloskey also pointed out that many 19th-century public health measures, although effective, had been based either on unscientific theories such as 'miasmas' or benefited from extra-scientific changes, such as in general standards of housekeeping and cleanliness. When asked by DeVries whether the 'mortality revolution' was across-the-board or age-specific, Easterlin opined that child mortality declined first, followed by infant mortality, and that it was not until the third mortality revolution of the 1960s that mortality rates for older people began to decline significantly.

In presenting the session's final paper, about quality-adjusted prices for the American automobile industry, Daniel Raff (Pennsylvania) characterized his joint work with Manuel Trajtenberg (Tel Aviv) as taking Gordon's calculations for prices in the 1950-80 period and extending them backward to the earliest, most innovative years of the automobile industry. The authors estimate quality-adjusted (hedonic) prices by taking into account changes in wheelbase, engine displacement, and five engineering systems. Not surprisingly, they conclude that most of the extraordinary decline in prices during the 1906-1940 period occurred in the first eight to 12 years of the period, and that 60% of the overall decline could be attributed to process innovation and 40% to design change.

Martha Olney (UC-Berkeley) focused her comments on social and economic factors affecting the pre-World War II auto industry and on the data themselves. She noted that price, quality, and income changes are insufficient to explain the big increases in auto sales of the 1920s, a full decade after the estimated dramatic decline in quality-adjusted prices. She argued that credit, advertising, and complementary goods also mattered. Joshua Rosenbloom (Kansas) questioned how the profusion of choices of model, style and color which characterized the industry in the 1920s might have affected the consumer's perception of automobile 'quality'.

The fourth panel, with William Hutchinson (Miami) in the chair, examined labor markets and industrial organization. Janice Rye Kinghorn (Washington U.) contrasts standard cartel theory with the record of cartelization in Germany, finding that facts and theory are inconsistent. Cartelization was not associated with monopoly power, and by stabilizing demand it may in fact have allowed firms to use more productive technologies. She ends with a call for a broader theoretical perspective on the motives and effects of cartelization, which would take into account differences in institutional environments.

'The best party at the ASSA.'

In her comments, Caroline Fohlin (Caltech) posed several questions about Kinghorn's argument and evidence. She asked whether cyclical factors such as depressions or shifts in demand might account for the lower prices observed after cartelization. Since Kinghorn's argument depends on comparisons with Britain, Fohlin suggested that she investigate demand shifts in both countries. She also urged Kinghorn to determine how technology changed when firms joined a cartel and to examine the issue of price stabilization more closely, since it seemed more pronounced in the less cartelized industries. Finally, she noted that the peculiarities of German financial markets may have provided yet another reason for the cartels' development. Rosenbloom observed that the theory concerns stabilization of firm demand, not of aggregate demand, and he too wanted more evidence of stabilization at that level. He then raised the issue of cheating, which, had it been pronounced, could have led to overproduction and the low observed prices. Kinghorn replied that it is not clear how cheating was detected and punished – although the cartels might have been formed to achieve a monopoly, they failed to do so, but they did stabilize demand.

Tomas Nonnenmacher (Illinois) next took up the issue of network quality and integration in mid-19th-century American telegraphy. In 1852 more than 100 telegraph companies operated in the United States. Their quality of service was low, infrastructure was poorly constructed, and messages transmitted over the lines of more than one company were often garbled. By 1866 the industry was in the hands of a single firm, Western Union, and according to Nonnenmacher, monopoly profits are not the sole explanation for integration of the industry. Indeed, in his view, Western Union could offer higher quality, and perhaps greater efficiency than the older un-integrated network.

In his comments, Alex Field (Santa Clara) stressed the paper's major conclusion, which follows from considering the transactions costs inherent in the nation's first communications network, that the competitive solution yielded low-quality service because telegraph companies had difficulty monitoring firms retransmitting their messages, and could not ensure that messages were sent without error. Monopoly, therefore, actually improved the quality of service. Further, a large question remains: why did the United States end up with a national monopoly? Monopolies along each strand of the network might have improved service and resulted in the same efficiency gains. Did a national monopoly triumph because of the opportunities it offered for cartelization and monopoly profits, or was it an issue of minimum efficient scale?

Nonnenmacher agreed that cartelization had played a role and that there were other reasons for network integration besides service quality, such as barriers to entry which allowed Western Union to earn high profits. Gavin Wright (Stanford) asked about the effects of employment law. Nonnenmacher replied that the telegraph companies had dismissed people without difficulty, but Wright and Rosenbloom wondered how the network might have developed with different employment laws, for example, permitting courts to review dismissals. The discussion then addressed whether telegraph companies had held one another hostage, a point raised by Brian A'Hearn (Munich). Nonnenmacher stressed the role of local competition and the wide variety of possible outcomes, depending on local circumstances.

Robert Margo and Farley Grubb entertaining Clio members and friends.

Joshua Rosenbloom, in the session's third paper, discussed labor market integration in late 19th and early 20th century America. Although American labor markets were extensive, integration was uneven and selective. Conditions in local labor markets might determine wages in the short run, but, in the long run, communities were integrated into much broader markets which could exercise a profound influence over wages. That is, wages in the US had lagged behind productivity growth because of rapid increase in labor supply due to immigration.

The discussant, Debbie Mullin (Bowling Green and Oberlin), focused on the gap between wages in the North and the South. She suggested employing a statistical analysis of wage gaps: for example, how they were affected by race or education. She also urged Rosenbloom to extend the analysis beyond wages alone, for example, by incorporating migration and information flows. Did southern wages remain low because southerners stopped coming North, even for an education? Would the story have changed had Reconstruction continued? Finally, she urged Rosenbloom to study the barriers between southern and northern labor markets. Rosenbloom responded that it had been cheaper for northern companies to look for European immigrants before World War I than to set up employment agencies in the South.

The final paper, by Masao Suzuki (Mills), examined undocumented migrants from Japan to the US before World War I. After recounting the history of Japanese immigration to the United States, Suzuki estimates the number of undocumented Japanese immigrants who entered the United States in the 1920s, by comparing the Census count of Japanese immigrants in 1920 and 1930 and adjusting for those who had died or returned to Japan. According to his calculations, some 13% of Japanese immigrants in 1930 were undocumented.

After noting the relevance of the topic to current debates about immigration, the discussant, David Mullin (Bowling Green and Oberlin), raised several methodological questions, the first about the inter-period comparisons that form the basis of Suzuki's estimate. Since the estimate was derived from six different elements, each subject to doubt, Mullin urged Suzuki to include an error term in his estimate, a recommendation seconded by Hutchinson. Mullin also worried about discrepancies between Suzuki's estimates and official figures that show a net outmigration in the 1920s. He wondered whether those who returned to Japan were relatively wealthy, as evidence about declining land holding by Japanese residents in the 1920s would suggest. Suzuki replied that the Japanese outmigrants were in fact at the bottom of the occupational ladder, at least in that decade. Finally, Mullin asked why the Japanese came to the United States when opportunities here were so restricted. Suzuki responded that the Japanese came for work despite the restrictions. The audience then discussed further research possibilities, with Hoffman urging Suzuki to look at Japanese consular records, and A'Hearn suggesting a comparison of the Japanese with other ethnic groups.

The San Francisco sessions attracted a number of newcomers to The Cliometric Society, who seemed to enjoy the camaraderie and the high quality of papers and discussion. On Saturday evening, both newcomers and veterans were treated to what was undoubtedly the best party at the ASSA meetings.

NBER Report *(continued from page 13)*

correspondent and branch banking systems. Rockoff and Bordo concluded by noting that the mergers during the 1890-1910 period involved some evident mistakes, as do mergers in the US today, but the Federal Reserve should maintain its focus on the system as a whole.

In her dissertation presentation, Carolyn Moehling (Northwestern) provided a historical perspective on the current issue of adult children residing with their parents, in 'Residence and Work Decision in a Family Context: Evidence from Turn-of-the-Century America.' She presents time series data from the Census indicating that the proportion of persons aged 19-22 living with their parents rose between 1900 and 1940, fell from 1940 to 1970, and rose rapidly thereafter. Yet, by 1990, the co-residence share was somewhat below the level prevailing in 1900 and 1910. In order to gain perspective, Moehling investigates residence patterns in the 1900 and 1910 Integrated Public Use Microdata Samples, testing a two-sided altruism model, which predicts that co-residence will be more common if the gap between parent's and children's incomes is large in either direction. That is, children will tend to live with (and be supported by) wealthy parents or live with (and support) very poor parents. Moehling finds limited evidence for the mutual support model; widows and poor families were more likely to have co-resident adults and high income families were less likely to have children residing outside the household.

The evidence, especially the time series data *circa* 1940, came under some criticism. Goldin also expressed concern about the treatment of college students living in dorms. In addition, the methods of inferring co-residence and absence in the 1900 and 1910 samples was the subject of general discussion. Costa suggested including housing cost variables. Menes raised issues regarding rent controls in urban areas and availability of first jobs in explaining recent residence trends of young adults.

The afternoon concluded with the final dissertation presentation by John Majewski (UCLA) on 'Mobilizing Rural Capital for Infrastructure Investment in Antebellum Pennsylvania and Virginia.' Majewski compares the patterns of investment in transportation infrastructure in two different social settings, Cumberland County, Pennsylvania, and Albemarle, Virginia. He finds that in both areas, most investment activity was local (before the railroad), that direct benefits to investors (in the form of dividends and capital gains in stock) were small, but that indirect benefits were important. Differences between the southern and northern regions first appeared with the railroad. In the Pennsylvania county, outside capitalists including the Second Bank of the US invested in the railroad (which was part of a trunk-line system) whereas in Virginia, the local land/slave owners and the state government contributed capital for the Virginia Central.

Because of its return to one of economic history's classic subjects, Majewski's paper invoked considerable commentary. Hanes asked how he knew early investors did not expect to make direct profits, and Craig inquired what constituted a failed project. Goldin asked how local property owners solved the free rider problem. Atack wondered whether tax records would show whether land owned by stockholders increased in value after the internal improvements.

The final day began with Hugh Rockoff offering 'The Paradox of Planning in World War Two', a revisionist account of the role of production planning in the US mobilization. The conventional view, advocated by Elliot Janeway, claimed that mobilization lagged until the War Production Board and its bureaucratic allocation scheme, the Controlled Materials Plan, replaced the market system in mid 1943. Rockoff argues, to the contrary, that most output growth occurred before the CPM became mandatory. The CMP allocation schemes often made little economic sense because shortages were already disappearing. In particular, they appear to have had little impact on productivity in the munitions industries.

Goldin questioned how one measures the timing of shortages, and Rhode asked about their regional dimensions. Margo wondered about the world market for weapons and materiel; for example, could supplies have come from South America? Libecap asked, if there was no crisis, what was behind the adoption of the CMP? Lamoreaux speculated that, given government propaganda about labor, consumer rationing, and war bonds, the war authorities could not allow the market to allocate resources which would generate 'excess profits' during spot shortages.

In their session, Tom Weiss and Lee Craig examined 'The Sources of Growth in 19th-Century US Agriculture: Methodological Issues.' They find the increase in output per worker in northern agriculture between 1860 and 1870 is linked to increases in the work time and intensity of women and children. In order to address whether this trend continued after 1870, they investigate the effects of varying assumptions about labor force participation rates, attempting to reconcile time requirements with labor force estimates. The population census yields estimates of 4.5 to five workers per farm, the occupation census about two workers, and adult male full-time equivalents approach about 3.5 to four (which is based on the marginal contribution of family members to marketable farm output). Craig finds the FTE approach appears preferable to the population approach and notes that it makes the growth of output higher.

Goldin asked what 'working on a farm' meant, especially for women. She also asserted the FTE approach seemed problematic, given recent evidence that married males earn roughly 30% more from their jobs than single males. Was this 30% to be attributed to women workers? White wondered whether the increased participation of women was a wartime effect or a long-run change. Gallman noted that the war may temporarily have changed attitudes about appropriate gender roles. Hanes asked whether the increased productivity was due to harder work effort or a shift from home to market production. Levenstein inquired how well farm wages captured intensity differences. Rosenbloom and Winifred Rothenberg (Tufts) asked how changing the output mix affected the seasonality of labor use. Atack noted that the regional pattern of agricultural activities changed, especially in the growth of dairy production.

Ken Sokoloff presented his joint work with David Dollar (World Bank), 'The Organization of Manufacturing during Early Industrialization: The Role of Agricultural Seasonality', which explores why there was so little cottage industry in the US. They suggest that, while putting-out was less efficient in a technical sense, it was more flexible, since it could utilize seasonal labor or labor confined to the home. American land abundance implied higher incomes, more livestock production (which made labor demand less seasonal) and it implied higher demand for meat than in England. The emphasis on land improvement in the winter and the cultivation of corn in addition to wheat also reduced seasonality. Sokoloff presents empirical evidence comparing seasonal wage premia in Britain and the US to support these claims.

Hanes asked about the impacts of the greater distances and lower population density in the US and about the role of history in determining location of putting-out industries. Lamoreaux wondered whether the decline in seasonality in Massachusetts from the 1770s was due to other factors, such as urban growth. Rothenberg suggested that whaling and attempts to extend the crop year through changing the crop mix were also important. Pierre Sicsic (Banque de France) was skeptical about the British data, especially about composition effects in the computation of average wages. Rothenberg noted that the structure of farm wages was very complex, but that Sokoloff's inference was probably right. Raff expressed concern about the effect of different lengths of the working day on reported wages. Davis asked why there was no putting-out in upstate New York. Sokoloff said there probably was, but might have appeared in Census data as firms without wage workers. Lamoreaux asked if putting-out in the US took a different form, perhaps with the worker providing the capital.

The final presentation of the conference was Paul Rhode's 'Oil *vs.* Industry: The Case of California in the Early 20th Century', which addresses the question of whether resource discoveries encourage or discourage local manufacturing development. He begins with a model adding labor mobility, transportation costs, and the possibility of using resources as manufacturing inputs into the standard three-sector model of the 'Dutch disease' literature. If resource discoveries lowered the price of fuel relative to manufactures, manufacturing was stimulated. Otherwise, the rising real wage would lead it to contract. Rhode then compares California's growth over the 1900-30 period to the model's predictions. Generally, his findings fit the 'industrialization' as opposed to 'de-industrialization' case. The oil boom *circa* 1900 in the previously fuel-scarce region stimulated income growth and manufacturing development. Regression analysis indicates that, in 1899, industries characterized nationally by large scale or high power intensity (as measured by horsepower per worker) were less likely to locate in the state, whereas by 1929, the power intensity effect reversed.

The audience responded to the results on industrial location. Fishback wanted some consideration of value added instead of employment as well as the use of panel techniques. Hanes indicated he would prefer the cost of power used rather than horsepower per worker and wondered about the treatment of the mining and mining-supply industries. Kim asked how Rhode's model differed from the standard Heckscher-Ohlin framework.

Program members forsook the Muse on two occasions: a clambake was held at the Harvard Faculty Club on Wednesday, and, joined by spouses and children, the group visited Fenway Park on a sweltering Tuesday night. The 1996 Summer Institute will again be organized by Engerman and Ferrie, and will meet July 8th through 11th.

Call for Papers

The Cliometric Society will sponsor sessions at the 1997 ASSA meetings in New Orleans January 5 through 7. The Selection Committee for these sessions will be co-chaired by Richard Grossman (Wesleyan University) and Sumner LaCroix (University of Hawaii) with Mary MacKinnon (McGill University), Coordinator. Please share this announcement with colleagues and students who may wish to submit their work.

Authors interested in presenting papers should send four copies of a two to five page proposal to the address below, or submit their proposals *via* e-mail. At least one author must be a member of The Cliometric Society. Summaries of all papers will be published as an insert in the October 1996 *Newsletter of The Cliometric Society.*

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Relevant Dates:

Three copies of paper proposals to The Cliometric Society office	**May 15, 1996**
Authors notified of acceptance of papers	**July 1, 1996**
Paper summaries due at The Cliometric Society office	**September 1, 1996**

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