

# The Cliometric Society

October 1992 Vol. 7 No. 3

## Report on the Conference of The Economic History Society of ANZ

by Bob Jackson (Australian National University)

(Perth, W. A.) The Economic History Society of Australia and New Zealand held its biennial conference on 8-10 July at the University of Western Australia. The program was arranged by Mel Davies (Western Australia). Reg Appleyard (Western Australia) welcomed participants at a reception on the eve of the conference.

After the keynote address in which the Society's president Boris Schedvin (Melbourne) dwelt on some tasks for the future, papers by Marnie Haig-Muir (Deakin) and Christopher Lloyd (New England) considered the place of economic history. Haig-Muir discussed the influence of economic historians on the way in which Australian historical studies have been perceived, conceptualised, interpreted, and portrayed. Historians in general have had a vital role in the construction of views of reality and perceptions of national identity that have influenced the wider population, while economic history in particular has played a fundamental and central organising role in the projection of a coherent national past. Lloyd argued that a reintegration of economics, sociology, and structural history is desirable. He discussed the various methodological and theoretical developments and schools in the economic historiography of Australia; the methodological foundations of neoclassical, institutionalist, and sociological approaches to economic history; and the claims of methodological structuralism to be a unifying foundation for a resolutely historical social science.

Papers on business history were given by Stephen Nicholas (New South Wales), Christina Cregan (Otago), and Ralph Hayburn (Otago). Mac Boot (Australian National University) chaired the session and Diane Hutchinson (Sydney) acted as discussant. Nicholas reported on joint work with Ann Carlos (Colorado) on the costs of agency in the Hudson's Bay Company between 1670 and 1810. Private trade by managers was the most serious agency problem the company faced, and Nicholas and Carlos calibrated a formal cost of agency model to assess the company's handling of this problem. Trust, reputation, and company culture have only recently begun to have an impact on the way economists analyse the organisation of modern corporations, but they appear to have been powerful devices for attenuating the costs of agency in the Hudson's Bay Company up to 1810. Cregan's paper argued for a business history approach to the explanation of trade union growth. Economic theories which give prominence to wages are flawed by the free-rider paradox, and a multidisciplinary model of membership which distinguishes between core and remainder types gives a better explanation of trends in union membership in postwar Britain. Hayburn argued that business history tends to be overlooked because it has not been properly delineated as a discipline and so lacks a consistent theoretical or empirical approach. Business history should be

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# Secretary/Treasurer's Notes

## Trustees' Meeting

The Trustees of The Cliometric Society met in Boston on September 19, 1992.

The major accomplishment of the last two Trustees' Meetings has been the arduous task of writing By-Laws for the Society. I am pleased with the results and thank the Trustees for all their work. In December, members will receive the proposal for ratification.

Other business discussed: Although we are running a small deficit, dues will remain the same with the exception of a \$5 increase in the optional Sustaining Membership dues. Locations for the next two Cliometrics Conferences were selected. The 1993 Conference will be at Northwestern University, May 14-16, and the 1994 meeting will be held at the University of Arizona. There was discussion of how we will select the papers for the C-session sponsored by the Society at the International Economic History Association meeting. This *Newsletter* includes a call for papers for that session. The selection committee will be announced in the next issue. The Society will sponsor our usual sessions at the 1994 ASSA meetings in Boston, Monday, January 3 through Wednesday, January 5. The Secretary/Treasurer

is charged with finding co-chairs to select the papers. Please feel free to volunteer.

## 1993 ASSA Meetings

Program Chairs Eugene White and Bill Sundstrom did a wonderful job organizing our four sessions for this year's ASSA meeting in Anaheim, California, January 5-7. We hope that all of you attending the meeting will join us Wednesday evening at 8:30 for a cocktail party. We look forward to seeing you there!

## Membership Renewal

Besides the usual announcements and request for dues, this year's December Membership Renewal Letter will contain two important additions. As I mentioned in the report of the Trustee's meeting, you will receive a copy of the proposed Society By-Laws for ratification.

You will also receive our request to list your research interest(s) according to the *Journal of Economic Literature* classification system. We will provide a checklist based on this system to help all members update their records.

Please assist us in revamping our membership database by returning your renewal form promptly. I hope our new "Cliomet Net" system will be working by renewal time, so having files up to date will benefit our members in two ways. First, the networking system will enable individual members to locate others with similar research interests and expertise, and, second, provide their current addresses, telephone and fax numbers at the same time. Please take the time to ensure that this information is correct as well while you update your form.

## Cliometrics in China

The Chinese-language journal *Zhong Guo Jing Ji Shi Yan Jiu* (*Research in the Chinese Economic History*), in its second quarterly number for 1992, contains an article, "A Recommendation and Review of Cliometrics," by Society member Ningwu Qu of the Beijing College of Economics. In his article Qu surveys the development of Cliometrics from the 1950s, major topics in the economic history of the USA, the spread of Cliometric approaches to the economic histories of other regions, and commends a more quantitative-theoretical approach to his colleagues in economic history. We wish Qu continued success.

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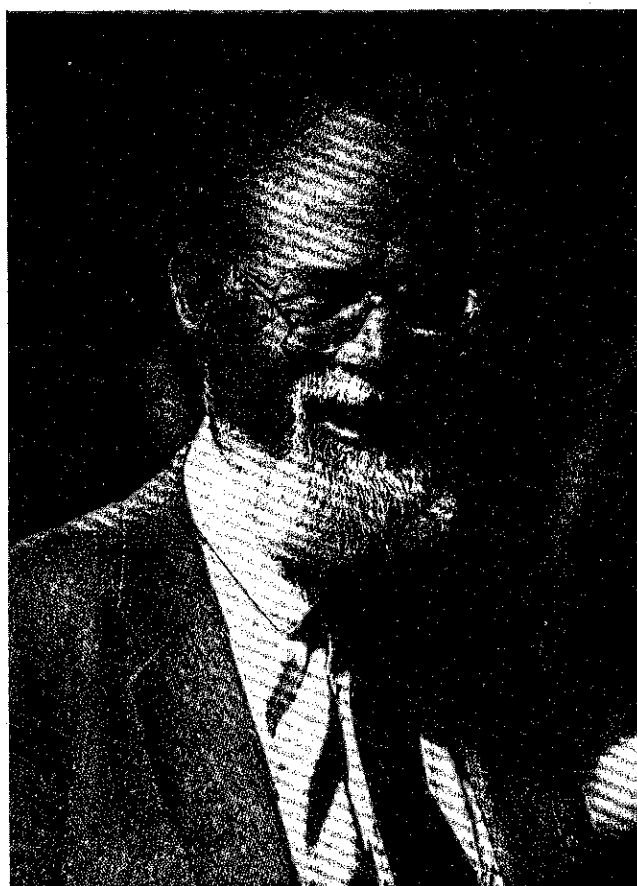
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## AN INTERVIEW WITH ERIC JONES

### *Editors' Note:*

*This issue offers a diversion from our series of interviews with the North American founders of Cliometrics. We publish a conversation with a British economic historian who was an early participant in the Purdue conferences, and has since been both contributor to and critic of quantitative theoretical economic history. Eric Jones is Professor of Economics (Economic History) at La Trobe University, Australia, and Professorial Associate at the Graduate School of Management, University of Melbourne. He began his academic career at Oxford, moving on to Reading and Northwestern before his arrival at La Trobe in the early 1970s. He has also visited Exeter (England), Purdue, Yale, and The Institute for Advanced Study, Princeton.*

*Most recently he has been Visiting Professor at the University of California, Davis, where last spring he presented a target of opportunity to two Cliometric Society members, Nancy Folbre and Michael Huberman, both also visitors at Davis in 1991-92. By comparison with other interviews we have published, this one was rather impromptu, and Eric had no advance notice of the questions he would face. The interview took place on March 12, 1992, after Nancy and Michael had arrived, tape recorder and camera in hand. They write:*



Photograph by Nancy Folbre, March 1992

*We were immediately impressed by Eric. He was most forthcoming with detailed suggestions for our own research. Conversation with him was as rich as it was rapid, moving easily from the trees to the forest. He challenged us never to forget the big picture in our writings. Above all, we found him an unabashed and passionate defender (and practitioner) of economic history in its many traditions. We wanted to know why — and we wanted others to hear him as well.*

**What do you think of the new work on agriculture and industrialization in light of your own contributions in this area?**

I don't find it very interesting. I think that a big opportunity has been missed to generate new evidence from primary sources. Much of the new work is really exemplifying peoples' command of technique, that is the cliometric type of work, the quantitative work, rather than using some of the big research grants to go round the archives and collect together information from grass-roots primary sources, the kind of source that I was always interested in. The opportunity's been lost. I've still got a lot of cards relating to farmers who had original eighteenth- and nineteenth-century accounts, which we never managed to get round to collecting at Reading. A few thousands of dollars would have made a big difference there.

What I find is that the new work is constantly churning existing series. Some of the investigators are certainly looking at the archives and collecting samples, but there is too much of a bias towards work on Parliamentary rather than other enclosures. My basic feeling is one of disappointment. Work has become to my mind a display of forensics among people with technical training, which permits them to discuss the implications of various models when in many cases the basic series we have aren't worth a damn.

**Keeping to agriculture and industrialization, what has been the effect of these 'forensics' on the questions asked? Are they any different from what they were twenty, twenty-five years ago?**

Yes, we've dropped a major question. We've dropped the question about the causes of the so-called industrial revolution and the agricultural revolution. One of the reasons for this is that the concern with rates of growth over twenty, thirty, and forty-year segments of the eighteenth and nineteenth centuries has produced endless arguments as to where the breaks came. There's been an exhaustion about the original question. What people seem to do when they get exhausted with a question that appears intractable is shift away to discussing aspects of the phenomenon, so that you get case studies by region, by industry, by sector. And yet that would be the place we would have an enormous opportunity, especially with institutionalist types of explanation. We should be looking at the seventeenth century, not the eighteenth and nineteenth, and not remain prisoners of the alleged series of output that seem to exist for the eighteenth and nineteenth centuries.

**Does that mean that you don't think it's an intractable problem to ask a question about causes?**

I don't think it's intractable. I think there could be exciting new ways to look at it in an institutionalist framework. We need to look at changing political structures, sociological structures, changes in incentives, and things which are messier and require deeper knowledge of social history. (I'm thinking of Britain, of course, and I assume you are in all of this). This is against the temper of the times. I hold it against the development of so much in the way of technical expertise and the computer, which has drawn attention away from the broader questions. I say it's not intractable, though I don't think it's as tractable as some of the things you can do when you work on the machinery which grinds outputs from inputs in a standard, 'engineering' way. Somehow we've lost our way. We're concerned with the dimensions of the problem but not why it happened.

**Can you think of any positive ways the new work, the cliometric work, has added to our knowledge?**

Well, it's refined our statistical picture of large parts of the dominant mountain ranges of the eighteenth and particularly the nineteenth century but I'm pretty skeptical about the basis of the information in many cases. It doesn't pay a younger scholar to go off on what would be called

a 'fishing expedition'—a term I've heard used about people doing work on apparently minor industries or topics. It pays that person better to make clever adjustments to the results made by establishment figures. This is difficult to avoid unless the establishment figures are going to say, 'Well, don't refine my work, do something new,' and are going to reward that. That's against human nature, I guess.

**Your answer, I think, is 'no.' What are the implications?**

One of the unfortunate by-products of the cliometric emphasis is that we've lost our larger audience among historians in general, and also an even broader audience than that—the kind of audience that participates in discussion and debate over general political and economic trends. That audience was once informed by historical research, but has found it increasingly difficult to read, much less understand and debate, the findings that are emerging.

For people in education to say, essentially, 'If you're not prepared to go to second-year graduate school in economics you can't expect to read our stuff,' is a very curious result. We don't have, in core economic history, the kinds of popularizers one finds in astronomy with Carl Sagan, or in biology with Stephen Jay Gould. I don't see any of our great figures turning aside and grasping for the popular audience, commenting on major trends in the world at the moment, either the faltering growth in this country, the rise of Japan, or what's going on in the Middle East, and saying, 'Look, we've got something to say about this. We can ask orderly questions and make sensible responses.'

As a result, so many of these broader social and, particularly, international issues (which I am personally more interested in than the British industrial revolution), have been left to area specialists, who have very little economics and sometimes very little history. I think we've missed a big market opportunity there, and a chance of keeping our audience. I think that economic historians, rather than economists, are the people you should expect to find on the television or in other countries on the radio.

Somehow we've split into a relatively self-regarding bunch of people doing what I call 'follow-my-leader research,' that is, doing research on the boot-and-shoe industry somewhere because the professor has done the boot-and-shoe industry somewhere else. The high-tech people are all talking to one another about growth rates,

when in fact many of the interesting questions aren't sensitive to a change in locating an inflection point in 1760, 1780, or 1800. That may be heresy from an historian's point-of-view but I think it's the case: the interesting questions just aren't sensitive to finding that rates of growth over the late eighteenth, early nineteenth centuries in Britain or the United States varied by plus or minus one percent from the number you first thought of.

**You've taught economic history on three continents. Are there important differences in the way economic history is taught and research conducted?**

Yes, there are. There are two aspects to it. One is the institutional and the other the intellectual aspect. Institutionally, having taught in history departments, economics departments, and economic history departments, I think we should be in our own departments because I have a vision of economic history eventually developing as a soft social science. Actually it's a very hard social science, but you know the conventional terms. This comes from my experience of once being in a history department, where the historians really didn't want to know about even elementary economic reasoning and it was hopeless trying to teach their students, and being in economics departments where people always want one to do fashionable and high-tech things. The difficulty is that separate departments typically become too isolated from economics. But in joint departments one would have thought that, with good will, one could avoid having the economists dictating what's to be done—mainly through pressure on people to do work on recent, developed economies rather than on earlier periods or less-developed economies.

Intellectually, I take an optimistic view. The way the subject is set up may be slightly unfortunate, since the prestige institutions in the U.S. are now very heavily in the hands of high-tech economists. Yet the United States is so big that there's always something else going on. There are loose-knit groups of people interested in all sorts of related topics. There are the area specialists, the women's studies people, anthropologists, comparative historical sociologists, and all sorts of people out there playing around the edges of what we do.

**What does this imply for the future of economic history?**

These people may capture economic history and the broad audience, and they've got some chance of changing the

minds of economic historians. I'm really fairly optimistic. I think we're at the end of a phase, not at its beginning. I was in close to the beginning. I was at the second cliometrics meeting. That's been very powerful; it's drawn in very clever minds and very good debaters. We know what can be done when graduate students in economics get that sort of training. Now is the time to train them more in history, more in area studies, more in the other social sciences. I don't think that an economic historian really needs the full economics Ph.D. but he or she oughtn't to miss out on the main parts of it. We need to trade off some of the high-tech stuff for more work in other social sciences, more work on other cultures, more work on other periods of history, than an economic historian who's taking an economics Ph.D. now gets.

The future, institutionally? It's really difficult for someone who works in Australia to be optimistic institutionally because budgets are being cut. To come here and find that this land of abundance is also suffering from the first hacks of the ax is fairly depressing.

**And future research in economic history?**

I would say that economic history of an interesting kind exists to some extent, will go on existing, and will be developed by people who are in adjacent areas or have specialized interests. I'm not sure about labour history, which I don't read, but I sense from the interest here [UC Davis] that women's studies will change things a lot more than labour history has done. Labour history, after all, is only a study of one factor of production, or maybe of how one factor of production didn't get its just desserts, but women's studies is a whole dimension. Environmental studies may well bring back geographical studies, which we've slung out of the window, though I don't find the historical geographers currently very interesting.

There are social scientists—from the historical parts of social sciences—ringing round us and reading some work in economic history—not reading the more difficult economic material, but reading a lot of the conclusions. They're going to incorporate economic history. I've had several comparative historical sociologists tell me that they want to get a better grip of economic history in order to incorporate it in what they do. They don't want to argue in terms of economic models or economic determinism; they simply want to allow for the dimension.

**Where will the changes come from?**

I think that the changes will come from the outside if we

don't bring about changes inside. But I'm actually optimistic about that, too, because we have some very powerful and intellectually outstanding work in economic history. We have seen the big wave of quantification which can answer questions about magnitudes but doesn't in itself tell us much about why things happen. I think that's coming towards its end and will mutate into something else.

Am I allowed to use names at all? I think the most fertile mind in economic history in my lifetime has been Doug North's. You may want to take Alex Field's view that the new institutional economics is all promise and no performance—you know, 'Where's the beef?' But there has got to be something there in the institutional change, institutional analysis, transactions cost approach. And when you consider that North was also a major figure in starting the old new economic history, there's hope for humanity after all. The other very interesting work is Paul David's. I think if I had to say that there is one person working on the key problem which all the social sciences have failed to address and the historians have failed to address (except by assumption or default), it's Paul David with his work on path-dependence.

We need a way of deciding where the writ of history ends and the writ of market forces starts. At the moment we're in economics-style economic history, which is a 'structural forces' subject. Although it's supposed to be about change through time, it isn't very interested in history as such. It's interested in the sorts of things you'd expect people in an allocative, equilibria-based science to believe. On the other hand there are the historians, who believe that everything can be explained by history, by the so-called 'genetic' approach, as if I could explain you and why you're sitting here entirely in terms of your pasts. That's as though I could predict that Michael Huberman and Nancy Folbre would be sitting here, as they are, because their parentage somehow led them to this spot, and that all we need to know to understand why you're here today is your histories. Of course, there's some truth in that. There's also some truth that we're held up here in our chairs by anti-gravity or some other structural force. It's putting the two things together that's the issue. I think Paul David may introduce into economic history something we're not going to get from either general history or economics: the start of a line of investigation where we learn how to render at one and the same time unto the God of competitive forces what is that God's, and to the Caesar of the 'genetic' approach what is that Caesar's.

In recent work you look at questions of develop-

ment—why some regions develop and others don't. Why to your mind are Asia and Europe so different?

May I answer that a bit autobiographically, or at least in terms of the two books I've done, because there is a reflection of the nature of our subject in the history of those books? (There are other factors, like the outrageous price asked for the second one). When I wrote *The European Miracle*<sup>1</sup> I wanted to see what a synthesis of the explanations of what made Europe 'first' might look like. I wanted to see whether I could add anything by way of change in emphasis or even originality to that problem, the great problematic of the Rise of the West. And I did it in a conventional way. I put forth special attributes of European economic life, starting with the physical setting and working through a lot of other things by reading as much as possible. I came up with a picture that was a composite. The book is structured so that each chapter partly overlays the next thematically, and also chronologically. It builds up from background considerations towards foreground considerations while progressing through time. This seems to have gone quite well, at least judging by the fact that I'm citation rich. Afterwards I started to think that this was the wrong way to approach the question, and certainly the wrong way to explain the divergence between Europe and Asia. You see, all I did in *The European Miracle* that was faintly novel was to play up the environmental aspect and use Asian civilizations as 'controls' on European experience. We don't do enough comparative work in economic history or think enough as scientists do in terms of controls. But essentially I assumed that Asian societies lacked a magic ingredient, or rather a recipe, onto which Europe had somehow stumbled. This risks mistaking what are merely European attributes for the general causes of economic growth.

When I came to write *Growth Recurring*<sup>2</sup> I took a different tack, which I think is far more interesting. This tack sprang from more than one perception. Economic growth does not seem to have a linear history—it seems to have appeared and reappeared more than once, even in the West. Some episodes in the history of major societies in Asia seem to have been ones of real growth. That is where Japan came in. There may have been other cases which are too poorly examined or documented for us to make a guess yet. The argument amounts to asserting that there were early cases of economic growth, though doing so on

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<sup>1</sup>Cambridge U.P., 1981; Second Edition, 1987.

<sup>2</sup>Clarendon Press, Oxford U.P., 1988; paperback, 1992.

## Report On the Canadian Cliometrics Conference

by Ann Carlos (University of Colorado) and Angela Redish (University of British Columbia)

(Vancouver, B.C.) The 18th (eighteen-monthly) conference on the application of quantitative methods to Canadian economic history took place at the University of British Columbia, on October 2 and 3, 1992. "Economic Growth and Public Policy" was the general theme of the programme arranged by Ruth Dupré (École des Hautes Études Commerciales). Fear and trembling had greeted the announcement that Vancouver would be the site for the fall conference organized by Don Paterson (UBC), but the weekend dawned sunny and warm, and the wonderful West coast cuisine was the icing on the cake, not just a safe haven from the elements.

Ann Carlos and Frank Lewis (Queen's) opened the conference by examining "The Creative Financing of an Unprofitable Enterprise: The Grand Trunk Railway of Canada 1853-1881." They explained how this chronically near-bankrupt railroad acquired funds by continuously restructuring its capital account through sales of more senior issues. They also analysed the ways in which Canadian bond guarantees affected the market price of the Company's securities. In his discussion, Peter George (McMaster) asked to see some sensitivity analysis on the extent to which the results were dependent on the time period and settlement time chosen. Knick Harley (Western Ontario) wondered what would have happened had the 1861 restructuring taken place under Common Law rather than as a statutory reorganization.

The Canadian effort in World War I was financed by an unprecedentedly large issue of debt. Ian Drummond (Toronto) in "Debt and the Dominion Government, 1914-1920" used detailed archival work to show that this did not involve significant financial innovation, as the required institutions were already in place. However, the success of the large Victory bond issues in 1917-19 reflected in part a monetary expansion just prior to those issues. Michael Bordo (Rutgers), the discussant, raised a number of points concerning the context of Drummond's findings. For example, is there evidence that the government used an efficient combination of debt, taxes and seigniorage? Why did the New York money market put more conditions on the Canadian government than the London market? What was the link between the bond price support program and monetary and fiscal policy? Harley picked up on the last point, and asked whether the price support operation could have permitted a hyperinflation similar to that in some European countries.

"Retaliation: The Canadian Response to the Smoot-Hawley Tariff," by Colleen Callahan, Judith McDonald and Anthony O'Brien (all of Lehigh) examined whether the changes in the Canadian tariff structure in 1931 were a direct response to the American tariff. The authors presented a political economy model for the 1931 election and the swing to a Conservative government. Lee Alston (Illinois), the discussant, felt that the right hand side variables were measured inappropriately given that the dependent variable was the percentage swing in the Conservative vote. Dupré argued that voting patterns for Catholics in Québec had long swings. Small swings in the percentage votes could lead to large changes in seats, and this was not captured by the simple model.

In "The Common Development of Institutional Change as Measured by Income Velocity: A Century of Evidence from Industrialized Countries" [title as abstract?], the authors, Michael Bordo, Lars Jonung (Lund), and the presenter, Pierre Siklos (Wilfrid Laurier), used co-integration tests and data for the U.S., U.K., Canada, Norway and Sweden between 1870 and 1990 to argue that there is a "common feature" to velocity, especially after World War II. Its source is in the institutional determinants of velocity and not in the behavior of income and interest rates. Neil Quigley (Western Ontario), the discussant, asked whether the authors had examples of the international transmission of institutional changes; Bordo replied that these were documented in other work. Quigley also asked why the authors used co-integration tests when the reported results of Perron unit root tests suggest that velocity in Canada and Sweden are not integrated processes. Siklos replied that other tests did not reject the unit root, and that the co-integration tests were valid. There followed an animated econometric discussion on the validity of the tests and how the coefficients in the estimated co-integrating relationship should be interpreted.

In "Money, Interest Rates and the Canadian Business Cycle, 1867-97," Kieran Furlong (Toronto) argued that the international transmission of business cycles occurred through goods rather than monetary markets. Using monthly data, he found that M1 moved pro-cyclically in response to demand shocks, despite counter-cyclical fluctuations in the monetary base. Ron Shearer (UBC) in his discussion noted that this conclusion depended in large part on using the Montréal call loan rate as a proxy

for the marginal rate of return on loans. Shearer commented that economic historians have doubted for years that the Montreal rate reflected either a real market transaction rate or the bank's marginal rate of return on loans. Others agreed and noted the need for archival work to identify such a variable.

Bruce Champ (Western Ontario) presented "Currency Elasticity and Banking Panics: Theory and Evidence," in which he and his co-authors (Bruce Smith and Steve Williamson) argue that the absence of banking panics in Canada is not a reflection of the branch banking system but of the elastic bank note system. The authors employed a dynamic general equilibrium model which showed that, in a world where there are seasonal fluctuations and business cycle shocks, an inelastic currency will cause seasonal cycles in interest rates and reserve ratios and (probabilistically) banking panics. The U.S. had panics and seasonal cycles in interest rates and reserve ratios, while Canada had seasonal cycles in bank note issues consistent with the predictions of the model. Angela Redish discussed the paper and noted that this interpretation is a complement to, not a substitute for, the branch banking hypothesis, since, in the context of the model, either inelastic currency or unit bank note issues could generate panics. In addition, she questioned whether or not the assumption of inelastic currency in the U.S. was consistent with deterministic seasonal fluctuations in the demand for liquidity. In the ensuing discussion Bordo, Harley and Shearer argued that the data were not generated by two independent economies but by economies linked by the international gold standard, and that this had important implications for the time series properties of the data under examination.

Jim Irwin (Central Michigan), the presenter, and Kris Inwood (Guelph) discussed their new estimates of "Inter-regional Differences in Economic Growth in Canada, 1870-1890." They constructed estimates of real commodity production for the four original Canadian Provinces. In addition, because they work at the sub-provincial level, they are able to provide estimates of the growth in *per capita* outputs for different areas within provincial regions. The authors argued that there was not much convergence. A heated debate followed on how one thinks about convergence, the use of a simple neo-classical model (Harley and Alston), the role of traded and non-traded commodities (Paterson), and different skill levels and why one would want to use sub-provincial units (Alan Green, Queen's).

In a 1991 *Explorations* paper Kris Inwood and Thanasis

Stengos (I & S) argued that Canadian GNP could be represented as a trend stationary process with structural breaks in 1896, 1914 and 1939. Neil Quigley in "What Can Univariate Models Tell Us About Canadian Economic Growth 1870-1985?" (co-authored with Lewis Evans) argued that the I & S methodology is flawed, in that it does not test for structural breaks, but merely for the presence of a unit root once the break(s) are assumed. Evans and Quigley show that the data could be (and in fact are) consistent with a large number of competing hypotheses and conclude that these tests are not useful for analysing historical hypotheses. Inwood, acting as discussant, responded that he accepted the spirit of Quigley's presentation, but had some reservations about the empirical analysis. If one allows for a variety of break points, the critical values must be recalculated. Further, the lag length should have been chosen to eliminate autocorrelation. He suggested that the link between structural break and exogeneity is weaker than described in I & S. A discussion of the statistical issues ensued before a return to the question of "What can univariate models tell us?" The consensus was "Not much."

A negative relationship between real common stock returns and expected inflation has been shown to exist in most O.E.C.D. countries. Canada is an exception. In her paper, "Nominal Taxes, Real Common Stock Returns and Expected Inflation: The Canadian Experience 1914-1992," Catherine McDevitt (Central Michigan) shows that obvious tax-based explanations cannot account for the inconsistency. In his comments, Harley pointed out that the paper provides more of a question than an answer and suggested looking at the role played by specific sectors, especially mining, and at the evaluation of raw material stocks. Pascal St. Amour (Queen's) questioned whether the econometric techniques were generating some spurious results.

Gillian Hamilton (Toronto) presented "Annulment Behaviour in Early Canadian Apprenticeship Contracts—Specific Capital or Uncertainty?" She examined the pattern of annulment rates in Montreal apprenticeship contracts, 1791-1820, and showed that the rate of annulment differed across different occupations and by whether there was a probationary period or an end payment. Alston's discussion focused on the structure of the paper. He felt it might be useful to allow the apprentices to be decision-makers within the theoretical model and to consider the role of asymmetry in the contact structure. Wayne Lewchuk (McMaster) asked if the model was plausible, given the nature of small businesses.



"Pensioners and the Canadian Pacific Railway" was the subject of Mary MacKinnon's (McGill) paper. After considering the organisation of the pension system, she examined the structure of the labour force from 1905 to 1960. She found the CPR did not have many old workers in the early period, but the older cohort grew over time. She posited changes in the financing of the scheme with the age distribution of the labor force. During the Depression, the railroad also retained many over the age of 65 ineligible for pensions. Alan Green, after reading comments by David Green (UBC), suggested that the paper might want to set the material within the framework of a simple model of deferred compensation. Quigley asked if this scheme had grown out of a fidelity scheme. Lou Cain (Loyola, Chicago) suggested she use an actuarial approach to the cost of the program, and Anthony Scott (UBC) wondered about the role of the unions.

Saturday morning began with three presentations of research in progress. Daniel Massicotte (Montréal) discussed "House Characteristics, Location and Market: Determining Montréal Rental Costs, 1731-1825." He showed that physical characteristics of the accommodation, location within the city and external circumstances each played a role in the determination of rents. There existed a very definite rent gradient for Montréal during this period. Larger stone dwellings had higher rents, as had those closer to the center. Rents were also affected by inflationary periods caused by war. Morris Altman (Saskatchewan) asked about the source of the sample, how it had been drawn, and how reliable it was.

Herb Emery (UBC) presented an analysis of fraternal organisations as providers of sickness insurance. The traditional wisdom is that, despite their obvious advantages in handling the problems of moral hazard (weekly visits to 'sick' brothers), commercial and government provision of sickness insurance replaced fraternal provision after World War II, because fraternal organisations were not financially viable. Emery used 70 years of data to estimate the probability of ruin and the 'implicit degree of risk loading' for seven Odd Fellows lodges in B.C. He concluded that, despite charging unconditional fees and paying flat benefits, the lodges were financially viable. Further research will examine what were the causes of the demise of fraternal sickness insurance. Mary Anne Hendryson (Western Washington) asked about the other roles of fraternal orders, and Emery responded that, while some orders (like the Masons) were strictly social organisations, many were primarily benefit societies. Lewchuk asked about the fixed benefits (\$5/week throughout the sample period) and whether the

probability of sickness was correlated with inflation or the business cycle. Hamilton asked whether the average age of joiners changed over the period. Emery answered no; it stayed at about 28 until the Depression.

Livio di Matteo (Lakehead) discussed "The Ontario 1892 Wealth Project," which is attempting to estimate wealth from Census and probate records for all Ontario counties for 1892. The project provides *per capita* wealth estimates and will also link county results to other work being done on fertility and on manufacturing. Results for 18 counties were presented. Peter Baskerville (Victoria) asked how representative was the sample and how reflective it was of the age of the population. Irwin wondered if there were any incentives encouraging people to get rid of property before death, thus biasing the wealth estimates. Lewchuk commented on the lack of women in the probate records and asked if this said something about the inheritance patterns for the period.

Marc St. Hilaire (SOREP, Paris) presented "The Growth and Spatial Distribution of the Dairy Industry in the Regions of Québec, 1871-1951," co-authored with Rêgis Thibeault (Québec, Chicoutimi). The paper examines the development of dairying as a case study of modernization in Québec's agricultural sector. The authors find that locational differences in dairying activities (liquid milk, butter, cheese) reflected the influence of the market, while expansion of the sector came through extensive changes (more cows) rather than intensive changes (more product per cow). Dupré, the discussant, noted that this work is part of Gérard Bouchard's major reexamination of the economic development of Québec and of the interaction between peasant communities and the market. Bouchard has described that interaction as 'co-integration' [the economists began to look as confused as the historians had been by the discussion of the same word the previous day!]. In this view, the peasant is neither the backward, self-sufficient individual of traditional historiography, nor the *homo economicus* of the economists, but rather a patriarch maximizing family security by diversifying interactions with the market. Dupré, and others, noting this paper did not discuss costs, suggested that the extensive practices may have been efficient. St. Hilaire agreed.

Kris Inwood and Phyllis Wagg (Dalhousie) carefully estimated the extent of handloom weaving in 1870 and found a surprising persistence of this 'old' technology. Inwood presented their paper, "A Rural Industry: Canadian Handloom Weaving circa 1870," which argues that persistence did not reflect an absence of market influences, since the weavers had close ties to the market,

but may have reflected the low opportunity cost of women's time. Altman, the discussant, suggested that persistence may reflect the quantity of cloth consumed by the weavers and suggested that provincial differences in production may reflect transportation costs. Inwood replied that the data are not strong enough to support inter-provincial comparisons. Harley noted that this research, analysing the interaction between the rural family economy and the mechanised industrial economy, is critical to our understanding of North American industrialization. He suggested that the rural family economy had been destroyed prior to the industrial revolution in Britain and that this represented an important difference between industrialization in Britain and in North America. Carlos asked whether the development of rural factories depended on transportation improvements in rural areas. Lewis suggested that the seasonality of farm production may have meant that the opportunity cost of women's time was often zero. Drummond asked when the length of a lag becomes problematic: 30 years? 200 years? Inwood thought handlooms represented a 30 year lag behind best practice.

Peter George presented "Indigenous Land Use and Harvesting Among the Cree in Western James Bay: A Historical and Contemporary Analysis." This paper summarized part of an ongoing project focusing on Cree economic development. George discussed the importance of land for the Cree, the continuity of institutional arrangements, the impact of outside forces on the pattern of Cree life and the place of renewable resources for future development. In her discussion, Carlos questioned whether the role of land-based activities was due to the importance of the land or whether it was due to a restricted set of activities available to the Cree. She also wondered whether the level of harvesting was very different from that found in other resource-based regions in Canada. Alston commented that he found the term culture a difficult one and would prefer a discussion of changes in the property rights structure.

The second research in progress session began with Peter Baskerville and Eric Sager (Victoria) discussing their ongoing project on "Unemployment in Late 19th Century Canada." They have a 10% random sample for seven cities for 1890 and 1901. Unemployment patterns do not appear related to personal characteristics but rather to occupation. The authors noted that there had been little debate about 'unemployment' during this period; contemporary discussion had focused on 'joblessness' for Canadians, allegedly caused by alien workers. Quigley suggested they proceed with a multivariate analysis, while Cain urged them to examine local newspapers for

information on the duration of unemployment.

Angela Redish presented preliminary results from her work with Carolyn Betts (UBC) and Michael Bordo on "Domestic vs. International Sources of the Great Depression in Canada." They use the time series properties of data on Canadian and U.S. industrial production, interest rates, money and prices in Canada, and a model of Canada as a small open economy on a fixed exchange rate, to identify two permanent shocks to the economy—one nominal and one real. Historical decompositions show that the forecast error in Canadian output during the Depression in the thirties is virtually all attributable to the real permanent shock. Discussion focused on the robustness of the result that monetary factors played a minor role.

Richard Szostak (Alberta) presented a technological explanation for the Great Depression. He argued that if the inventions of the late 1930s had occurred a decade earlier, the Depression would have been much less severe. He presented a sector by sector analysis of lack of inventive activity to support his hypothesis. Bordo said this doesn't explain other business cycles and asked how it differs from earlier interpretations such as by Alvin Hansen. Altman asked how the innovation argument can be reconciled with Temin's views of the importance of the gold standard, and with the impact of the rise of fascism on ending the Great Depression.

In "Urbanization and Sanitation in the Progressive Era," Lou Cain, the presenter, and Elyce Rotella (Indiana) examine the alleged (but unproven) argument that there exists a relationship between mortality and public works expenditures. They do indeed find that mortality from waterborne disease declines with expenditure on water, sewer, and refuse works. Letty Anderson (York), the discussant, said this was very useful work, but, unfortunately because of data limitations, the authors were examining a period after the big decline in mortality attributable to initial investments in water works. She suggested they might want to continue their work by examining refuse collection. Shearer was somewhat puzzled by the variable 'assessed value.' He felt it could mean more industrialization implying more pollution or it could reflect higher residential wealth; it probably did not reflect ability to pay, as the authors allege.

Pascal St. Amour presented a paper (written jointly with Jean Michel Chevet, L'INRA, Paris) on "The Volatility of Wheat Prices in 19th Century France," in which the authors analyse the impact of trade liberalization on

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# Report on the NBER/DAE Summer Institute

by Michael R. Haines (Colgate University)

(Cambridge, MA) The Development of the American Economy Program (DAE) of the National Bureau of Economic Research (NBER) held its annual Summer Institute on July 6-9, 1992, at the NBER in Cambridge, Massachusetts. Thirty-eight individuals were participants. The program consisted of thirteen papers and a dissertation session, and was organized by Michael Haines and Robert Margo (Vanderbilt), with the assistance of Charles Calomiris (Pennsylvania and Illinois) for financial history and Daniel Raff (Harvard and Columbia) and Naomi Lamoreaux (Brown) for industrial organization.

The opening day held a variety of papers. The first entry was by Jeffrey Williamson (Harvard) and Kevin O'Rourke (Columbia), "Were Heckscher and Ohlin Right? Putting History Back into the Factor Price Equalization Theorem." Using data for the United States and Great Britain, the authors find that Heckscher and Ohlin were indeed right: commodity price equalization did contribute to at least half the convergence in real wages from 1870 to 1914. Presenting additional data for a broader sample of nations in Europe and for three areas of overseas emigration (Australia, Argentina, and the USA) they also find that substantial real wage convergence characterized the wider market and that this could be traced as far back as 1850. Migration from the old world to the new played an important role. Finally, ratios of real wages to land rents fell in overseas areas while rising in Europe, supporting the view that factor mobility and reproducibility were important to the process. The paper is part of a longer term project investigating historical factor markets.

The next paper was by Claudia Goldin (Harvard), "The Meaning of College in the Lives of American Women: The Past One Hundred Years." Making use of a variety of published census documents, the Current Population Survey, and the 1940 and 1960 census micro public use samples, the author studies three cohorts of American women: those graduating 1900/20 who faced the choice of "family or career," those graduating 1945/65 who chose "family and then career," and those graduating since 1980 who are choosing "family and career". The paper examines economic, social, and demographic factors influencing changes in the tradeoffs made by well-educated American women, including the returns both to

the B.A. and to marriage to well-educated men. The high returns from both education and marriage for the second cohort led to rapid expansion of female college enrollments, and this, in turn, has been a factor in demands for greater gender equality in the labor market and in society in general.

The final paper of the first day was given by Lee Craig (North Carolina State) and Thomas Weiss (Kansas) on "Agricultural Productivity during the Decade of the Civil War." It has been claimed that the 1860s were a decade of accelerated productivity growth in American agriculture, based on improved mechanization, higher agricultural commodity prices, and institutional changes. New farm labor force estimates permit revision of agricultural product per worker, indicating that productivity did indeed increase significantly over the decade, although mechanization was apparently less important than believed. Higher commodity prices, greater utilization of women's and children's labor (partly in response to the absence or loss of adult males from the Civil War), and a different output mix favoring more use of women's labor help explain the results. Estimates for northern agriculture for the decade provide confirmation.

Day two was devoted to historical studies of industrial organization. B. Zorina Khan (Northeastern) and Kenneth Sokoloff (UCLA) presented "Heroes and Little People in Early American Technological History: A Comparison of Great Inventors and Ordinary Patentees, 1790-1861." They examine the role of especially prolific inventors and patentees, those with multiple patents and significant inventions. Analysis, including profit regression, was done to examine the covariates of great inventor status, such as time period, region, industry, and education and background of patentee.

The second paper was by Margaret Levenstein (Michigan), "Vertical Restraints in the Bromine Cartel: The Role of Wholesalers in Facilitating Collusion." It explores the importance of wholesaling contracts further "downstream" in the U.S. bromine cartel of the late 19th and early 20th centuries. There is evidence that such arrangements reinforced the cartel by providing common agency, but they also assisted in monitoring cartel members and in reducing incentives for cheating. This case study provides partial confirmation of the Bernheim-Whinston views of common marketing agencies.

Paper three of the I-O day was by Peter Tufano (Harvard), "Business Failure, Legal Innovation, and Financial Innovation in Historical Perspective." It deals with problems posed in the late 19th century by failures of large enterprises, notably railroads. Faced with the prospect of extraordinary economic dislocation from such failures, courts began to innovate in bankruptcy proceedings by modifying or setting aside previous contracts and by conducting asset auctions. In response there was financial innovation, including preferred stocks, income bonds, voting trusts, new bond covenants, and deferred-interest debt instruments. The obvious aim was to protect creditors in the new and uncertain legal environment.

The final paper of the day was by David Weiman and Richard Levin (both of Yale), "Preying for Monopoly: The Case of Southern Bell Telephone Company, 1894-1911." After the expiration of the basic Bell telephone patents in 1894, the industry was subject to competitive entry. Southern Bell responded at first by lowering prices to discourage entry and pricing below cost when it did occur. This was not effective, however, since Southern Bell had no significant cost advantage. After 1900, therefore, Southern Bell concentrated its investment in long distance (toll) lines and isolated the independents. This, in combination with local service pricing, forced most independents to sell out or to secure licenses favorable to Southern Bell. This was so successful that the parent company also adopted the strategy, which proved influential in creating the extensive Bell system of the 20th century.

The third day was devoted to financial history. The first presentation by Robert J. Weiner (Brandeis and Harvard) consisted of two papers, "Rediscovery of a 'Lost' Financial Market: Daily Oil Futures Behavior in the 19th Century" and "Origins of Futures Trading: The Oil Exchanges in the 19th Century." The author argues that these early markets, which flourished between the 1870s and the 1890s, were true futures markets for the exchange of spot, futures and options contracts for crude oil. The market vanished when Standard Oil stabilized and controlled prices beginning in the 1890s. Statistical tests are applied to show these markets were similar in behavior to modern, informationally-efficient futures markets.

The next paper, "Greenback Resumption and Silver Risk: The Economics and Politics of Monetary Regime Change in the United States, 1862-1900," was presented by Charles Calomiris. He argues that failure to account for monetary regime changes in the late 19th-century United States, *i.e.*, assuming unchanging money and price processes, can lead to misspecification. One consequence is the observed counter-cyclical behavior of prices in the

late 19th century rather than the more commonly observed pro-cyclical pattern. Most relevant was uncertainty surrounding a possible return to "free" silver after 1878, especially in the 1890s. This uncertainty meant that both *ex ante* or *ex post* nominal and real interest rates had a changing relationship to each other, leading to biases in econometric estimation.

The third paper of the session was by Gary Gorton (Pennsylvania), "The Dynamics of Reputation Formation in Early Bank Deposit Markets." During the era of "free banking" in the United States (1838-1863), substantial numbers and quantities of new bank notes appeared. Studying a sample of new banks issuing such notes in this period, Gorton argues that a reputation-effect hypothesis is confirmed: the notes (debt) of new banks carried a heavier discount than those of established banks with credit histories. Note holders would reduce the discount as they discovered that the notes could be successfully redeemed, and the process of discount convergence sped up over the period as technological change (the telegraph and the railroad) improved communication.

The final paper of the session was delivered by Carlos Ramirez (Harvard), "Did J.P. Morgan's Men Add Liquidity? Corporate Investment, Cash Flow and Financial Structure at the Turn of the 20th Century." The premise of the paper is that corporations reorganized and/or controlled by the House of Morgan should have relied less on retained earnings and internal funds to finance capital spending if the Morgan partner (on the board of directors) had monitored the firm effectively and if that partner had been able to get access to relatively cheap capital funds for the firm. Using parallel samples of 21 Morgan-controlled firms and 39 other firms for the period 1908-12, the author concludes that the data are consistent with the hypotheses, *i.e.*, that Morgan firms relied more on external capital funding and that capital spending of non-Morgan firms was more sensitive to cash flows.

Wednesday afternoon was devoted to part one of the dissertation session. Dora Costa (Chicago) presented results from a preliminary longitudinal study of Civil War Union Army recruits who were followed using their original military records and their later pension records. Of the men from 20 companies, 712 were found and linked to the 1900 census and 361 were linked to the 1910 census. Among the challenging findings: Union Army pensions accounted for a large proportion of the difference in retirement rates between veterans and non-veterans. Farmers were more likely to retire than others and hence the secular decline in male labor force participation rates

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## Report on the ESRC Quantitative Economic History Conference

by James Foreman-Peck (Saint Antony's College, Oxford)

(Oxford, England) This year's conference took place 18th-19th September at Saint Antony's College. The papers dealt with long-run economic growth (Solar, Baines/Howlett/Johnson, Turvey, Broadberry, Snooks, O'Rourke), national economic policy (Cardeñas, Irwin, Klug, Geiger), business policy (Higgins), testing economic relations (Perlman, Kouretas/Georgoutsos), and output measurement (Schulze, Sefton). Although the topics tended to be anglocentric, geographical coverage was wider than usual, with Australia, the United States, Mexico, and continental Europe getting a look in. Quantitative methods employed ranged from addition and subtraction to co-integration, computable general equilibrium models and panel estimation.

Peter Solar (Brussels) argued that the Old Poor Law was a security-led strategy for development that culminated in the Industrial Revolution. The institution encouraged (more efficient) wage labour by reducing land hunger. "Free" insurance for peasants against unemployment, old age and ill health reduced the demand for land (the alternative source of income) and made possible larger, more productive landholding. National legislation made credible the Poor Law commitment to collective insurance. Finance by a local property tax provided an incentive for local landowners to use labour for agricultural improvement, holding down their rate bills. Free riding by individual property owners (hiring new agricultural workers without regard for possible consequences for local rates) was completely avoided in closed parishes. Even in open parishes landholding was sufficiently concentrated to reduce free riding relative to the continental case, where any taxation for social security was national. Ann Kussmaul (St. Hilda's, Oxford) pointed out that rural industry also reduced land hunger. Bill Kennedy (LSE) conjectured that the parish was surely too small to be the optimum self-financing unit for social insurance.

The core of Dudley Baines', Peter Howlett's and Paul Johnson's (all of LSE) paper on the contribution of human capital to 19th-century British economic growth was two case studies of child workers (ages 7-14) and the Great Eastern railway at the end of the 19th century. They estimated Mincer-Becker individual earnings functions where the log of wages depended on age, literacy and length of employment, with a view to establishing whether spot or lifetime wages were paid. Variance with

age should be greater with a spot wage. A remarkable difference in male and female wages after age 16 was identified. From the parameters of their model, they concluded that the divergence between male and female literacy rates could have been economically rational, given the earnings differences. Morris Perlman (LSE) suggested there was more information about older workers' productivity so their variance would be less. A comparison of new hires at age 20 versus those already in jobs would be instructive. Steve Broadberry (Warwick) remarked that to generalise the results beyond railways would be difficult because piece rates were widespread in manufacturing.

Ralph Turvey (London) investigated the hypothesis that domestic refuse increased with economic growth, from the experience of London between 1855 and 1926. His cross-section income elasticity estimate for 1891-92 fitted better than was apparent in the diagram, since Fulham, an outlier London borough, could be brought in if a correction were made for their smaller carts. He concluded London refuse was used for growth as well as caused by it. Kennedy thought some reference needed to be made to regulation and sifting before we agreed a true relation with income had been identified. To satisfy allegedly widespread scholastic coprophilia, Turvey added an appendix showing that the price of horse manure declined over the century, as other manures became available and as the distance increased that it had to be transported from the stable as London grew. Refuse collection showed an extensive division of labour; there were even specialists in dog excrement, valuable in leather manufacture. Considerable conference interest was also shown in municipalisation, which Turvey maintained took place because of labour exploitation by contractors and customers' objections to tipping the dustman. John Treble (North Wales) pointed out that such an implicit two-part tariff had optimality properties, for customers, unlike employers, were able to monitor the dropping of refuse by the collectors.

Graeme Snooks (Australian National University) constructed an econometric model of the growth of "gross community income" in Australia over the last 200 years. Households accounted for 36% of GCI and the private and public sectors, on average 32% each. Household production was calculated from the product

of the number of workers, the stock of residential buildings and the stock of productive household equipment. Relative factor prices reflected long-run technical change; female-male wage ratios captured the household response. The household sector was in the ascendant in the period of retarded expansion 1890-1930s. Slower growth of productivity in housebuilding than in manufacturing depressed growth of the household sector. Avner Offer (Nuffield, Oxford) suggested some portion of the results stemmed from the use of market criteria to impute shadow prices and that household production was understated, asking why we did not rent spouses. During slump periods the shift to the household sector was involuntary; as Treble said, this could be the "discouraged" or "added" worker effect. Martin Weale (Cambridge) wanted Snooks to adopt definitions and terminology more consistent with the SNA.

Steve Broadberry extended US/UK manufacturing labour productivity comparisons back to 1820 and, in his presentation, added France and The Netherlands to his German/UK contrasts. He concluded there was no global convergence, contrary to the Baumol thesis, only local convergence within Europe; the US had always been ahead in manufacturing productivity and the Germans caught up with Britain much earlier than is usually thought. The size of the agricultural sector and the distortion of employing Paasche, rather than Laspeyres, indices accounted for the more generally accepted picture conveyed by the GDP per head series. Nick Woodward (U.C., Swansea) suggested the results were not necessarily adverse to Baumol. Convergence might mean merely that dispersion narrowed, and, on a similar point, Michael Kitson (Cambridge) remarked how the series for manufacturing output per head and for GDP per head moved similarly, except in the 1930s. Adam Klug (Princeton) noted the German capital series were unreliable for TFP comparisons.

Kevin O'Rourke (Dublin), in a paper co-authored with Jeffrey Williamson, specified a computable general equilibrium model to examine how much real wage convergence in the 19th century between Britain and the US could be attributed to price convergence. US capital-labour ratios were equal in manufacturing and agriculture so there were no Heckscher-Ohlin effects, but there were for Britain. For the full period (1870-1913) commodity price equalization reduced the Anglo-American real wage gap by 21%, a figure which exceeds actual measured convergence. Solar suggested that the analysis would be improved, if only in choice of data, by recogni-

zing the regional nature of the US economy. Weale thought the two linked GE models used by O'Rourke and Williamson were not the same as the H-O model.

Enrique Cardeñas' (Americas-Puebla, Mexico) study of long run Mexican economic policy between 1870 and 1950 showed, contrary to conventional opinion, that it was orthodox or conservative except in the 1880s and during the Revolution. Five subperiods could be distinguished by changes in major objectives and instruments. Monetary policy was constrained by the currency link to precious metals. Only tariffs, which anyway were not used for that purpose, provided much scope for fiscal policy. The budget deficit was always less than 1% of GDP, except when the government was borrowing for railway development in the years 1880 to 1894. Then the success of the investments generated additional tax revenue. During the Civil War of 1910-1916 when the metallic link was abandoned, Gresham's Law first came into play and, in an episode apparently unique in monetary history, was then reversed. Even the government in 1916 repudiated its own fiat currency and demanded tax payments in silver. Valpy Fitzgerald (St. Antony's, Oxford) thought that the lack of reference to the impact of the US economy on the periodization of Mexican economic policy was like Hamlet without the Prince, and that the major change on the real side in the 1930s could be discussed more, for these influenced the effectiveness and impact of instruments. Mexican free banking was chaotic and inflationary; therefore, a central bank was welcomed in the 1920s. Before the shift to Import Substituting Industrialization in 1950, trade with the US was expanding rapidly. It was the unexpected slamming of the US door that shifted Mexican policy towards ISI.

Doug Irwin's (Chicago) study of the political economy of the British tariff analysed voting patterns in the 1906 election. The hypothesis was that voters would be influenced by the international trade performance of their sector of employment. Which sectors were doing well was determined by the normalised trade balance. Voting in favour of free-trade liberals was then determined by proportions of industry workers in the constituency. As postulated, Birmingham machine tool and scientific instruments workers were against free trade; dockers were against Liberals because of the strong anti-Irish sentiment in Liverpool. Kitson pointed out that other issues were at stake in the 1906 election. Unionists, disliking their tax proposals, referred to Liberals as "fiscal perverts." Import propensity and export sales ratios might be better measures than trade balances because they

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## Cliometrics in Spain:

Report on "California and the Mediterranean: History of Two Competing Agricultures"

Universidad Hispanoamericana, Santa Maria de la Rabida  
Universidad de Sevilla, Palos de la Frontera (Huelva), Spain

July 20 - 24, 1992

by Susan Carter, Roger Ransom and Richard Sutch  
(University of California)

Differences between the commercial agricultures of California and the Mediterranean in the latter half of the nineteenth century were the topics of this conference, organized by José Morilla Critz, Director, Center for North American Studies of the Universidad de Alcalá de Henares, Madrid, Spain. The North American organizer was Alan Olmstead, Director, Institute of Governmental Affairs, University of California, Davis. Manuel González de Molina, Professor of Economics, Universidad de Granada, and Secretary, Center for North American Studies at the Universidad de Alcalá de Henares, handled local arrangements. The conference was jointly sponsored by the Spanish university system and the University of California's All-University Group in Economic History. It was held in honor of the 500th anniversary of the voyage of Christopher Columbus at the monastery of Santa Maria de la Rabida, where Columbus collected his self-confidence before departing from Spain precisely 500 years earlier. The founding of the University of California only 125 years ago seemed by contrast embarrassingly recent to the U.S. delegation. The conference provided both the stimulation and the opportunity for formalizing a long-standing, spontaneous group of scholars, led by Maurice Aymard, Adjunct Director, École de Hautes Études en Sciences Sociales, Paris, France, and sharing a common interest in Mediterranean/Californian agriculture.

Despite a similarity of soil and climate and participation in the same international markets, agriculture's growth and development in California and the Mediterranean were markedly different. Conferees explored three major areas in their search for sources of the differences. One was patterns of land ownership and property rights; a second was investment, agricultural credit and savings; the third was access to markets with special attention to the effects of tariffs, the size of local markets, and advertising and marketing.

José Pujol Andreu (Universidad de Bellaterra, Spain) began with a paper entitled "Specialization and Technical Change in Catalan Agriculture: Explicit Hypotheses."

After noting that Catalonia had an advanced industrial sector and a highly specialized commercial agriculture as early as the late-eighteenth century, Pujol explored the reasons for relatively slow agricultural productivity growth in the century that followed. His explanation emphasized the role of a land tenancy system in the wine-growing regions called "rabassa morta"—tenancy for the life of the grape vine—in reducing agricultural labor productivity and limiting movement out of wine production even after a devastating phylloxera infestation in the latter part of the period. Despite its negative consequences for agricultural and industrial prosperity, Pujol showed that the economy remained locked into this inefficient tenancy arrangement until the 1930s when the world-wide collapse of agricultural prices and the Spanish Civil War finally forced a reorganization.

Gilles Postel-Vinay (École des Hautes Études en Sciences Sociales, Paris, France), in "The Role of Credit in the Extent of Agricultural Specialization in the Mediterranean: The Case of Viticulture in the Languedoc in the Nineteenth and First Half of the Twentieth Centuries," asked whether agricultural credit facilitated or hindered the development of specialized agriculture. He argued that, in France at least, agricultural credit was a retarding influence. He made his case by considering credit's effect on the survival of farmers during two devastating crises—the phylloxera infestation and the Great Depression. He found that involvement in the credit market reduced farmers' survival rates in crises and concluded that the risks posed by such involvement must have hindered the development of specialized agriculture. Postel-Vinay placed much of the blame for this negative effect of agricultural credit on the details of French bankruptcy laws rather on agricultural credit *per se*.

Paul Rhode (University of North Carolina, Chapel Hill), in "The Rise of Intensive Agriculture in California, 1870-1914," considered a variety of hypotheses that have been advanced to explain the transformation of California agriculture from grazing and grains to capital-intensive crops, especially grapes, deciduous fruits and citrus.

After ruling out demand shifts and other competing hypotheses, Rhode argued that the intensification was precipitated by a dramatic drop in interest rates on agricultural loans. Calculations showing the interest rate sensitivity of profits in intensive agriculture with long-term payouts and evidence on the time path of California interest rates were presented.

María Teresa Pérez Picazo (Universidad de Murcia, Spain) posed a puzzle to begin her paper, "Small Family Farms and the Consolidation of Capitalism in Mediterranean Agriculture, 1850-1930." Liberal ideology predicted the disappearance of the small family farm—or a peasant revolution—with the development of capitalism. Yet in the Mediterranean, small family farms persisted and perhaps even flourished in the wake of capitalist advances. She argued that the relative success of small family farms was due to the effects of improving internal transportation, thereby expanding the market for agricultural products and to the imposition of taxes, creating an inducement for cash crops to raise required payments. She also emphasized the benefits of extended peasant families for pooling risks and taking advantage of economies of scale in commercial agriculture.

Antonio Miguel Bernal (Universidad de Sevilla, Spain) also emphasized the importance of traditional agriculture in Spain, even into the twentieth century. In "Obstacles to Agricultural Specialization in Modern Andalucía," he argued that modern agriculture did not appear in Andalucía until the 1960s and 1970s when a rapid rise in agricultural wage rates forced farmers to abandon old methods. In the remainder of the paper Bernal emphasized the disadvantages of modern competitive agriculture to farmers in present-day Spain. These disadvantages included more risk, harder work and lower profits.

Alan Olmstead and Paul Rhode began by noting that as recently as 1900 cereals, hay and forage accounted for more than half of California's agricultural output and that the U. S. was a major importer of Mediterranean fruit and nuts. In their paper, "International Competition in Mediterranean Products and the Rise of the California Fruit Industry 1880-1930," they documented the role of U.S. tariffs in transforming the situation: by the 1930s United States producers served almost all of their domestic market and competed directly with Mediterranean producers in the European market. They concluded with observations on how an exclusively national perspective in much of the literature on the development of California has diverted attention from some key facts, especially that expansion of California citrus production occurred under conditions of falling

prices world-wide, due in part to expanded supplies from European producers.

José Morilla Critz adopted an explicit international focus in his paper, "California's Entry Into the Market for Grape Products and the Effects on Mediterranean Producers, 1865-1925." Morilla began with the fact that California's dominance of the international market for grape products occurred in a period of falling prices. He argued that California producers came to dominate under these seemingly inauspicious conditions through aggressive new product development and innovative marketing strategies. Californians created seedless raisins, promoted new products such as raisin cakes and chocolate-covered raisins and promoted events such as "National Raisin Day" (April 13). Californians also pioneered the branding of grapes and raisins.

Maurice Aymard presented an analysis of the changing patterns of agricultural specialization in Sicily and southern Italy in "From Wheat to Citrus, From International Market to National Market: The Case of Sicily and Mezzogiorno (18th-20th Century)". He began by noting that increased international supplies and declining freight rates in the late-eighteenth and early-nineteenth centuries upset a longstanding pattern of specialized cereal production in Sicily and southern Italy. Lower transport costs also produced more favorable terms for citrus production. Spurred by land reform, large property holders shifted production away from wheat towards citrus crops in the first half of the nineteenth century. This shift meant substantial investments in trees, equipment, drainage and terracing and produced large enterprises which relied on tenant or casual day labor. Toward the end of the nineteenth century a new wave of foreign competition—particularly from California—forced Sicilian and Italian farmers out of the international market. However, specialized agriculture did not disappear. Italian citrus growers sold their crops to a rapidly expanding domestic market in which demand was stimulated by the growth of cities, population and income.

In "Land, Peasants and Power in Greece," Jorge Dertilis (University of Athens, Greece) described and analyzed the origins of Greece's uniquely democratic, egalitarian economic and political structure of the late-nineteenth and early-twentieth centuries. He emphasized the legacies of the Ottoman period, especially the adoption of Islamic notions of property rights, the dispossession of the Christian Church, the elimination of the Byzantine nobility, and a crippling of bourgeois power. Small agricultural producers were further empowered after the War of Greek Independence in 1821-30. Universal male



suffrage was won by 1843. Dertilis emphasized that these democratic political institutions gave Greek peasants further opportunities to change their agricultural economy. Key pieces of legislation were the Three Great Reforms: land reform, in which state and large private tracts were distributed to peasants; credit reform which made credit available to peasants on good terms; and tax reform which shifted taxes away from peasants. Discussion focused on the implications of this unique economic and political structure for the growth and development of Greek agriculture.

Aurora Gamez Amian (Universidad de Málaga, Spain) presented the results of her empirical investigation of the availability and cost of credit to various classes of farmers in late nineteenth- and early twentieth-century Andalusia. By examining details in the registration of loans she shows in her paper, "Credit for Agriculture in Andalusia," that many small farmers were unable to obtain any credit at all and that those who did had to accept high interest rates and lender control over the selection of crops.

Susan Carter (UC, Riverside), Roger Ransom (UC, Riverside) and Richard Sutch (UC, Berkeley), in "Agriculture, Savings and Growth: Conjectures on the California and Mediterranean Experiences," emphasized two sources of the divergent patterns of development in Mediterranean and Californian agriculture. First, a large domestic market was available to California farmers. Second, California's farmers could draw upon a large, reliable pool of inexpensive, locally-generated funds to finance their investment projects. The paper documents differentially high levels of investment in California agriculture and explains this in terms of: a) differentially positive expectations of high rates of return from sales to a large, stable domestic market, and b) a differentially abundant supply of loanable funds readily available at low interest rates. The supply of funds available to California farmers was a result of strong incentives for life-cycle savings provided by the California environment. Evidence of extremely high saving rates for U.S. working class families and of differentially high life-cycle saving in the United States was presented.

In "Silk: A Mediterranean Product," Giovanni Federico (Universita di Pisa, Italy) posed two questions. Why did silk develop in the Mediterranean but not in the United States and why did Italy dominate the Mediterranean production of silk? After considering a variety of hypotheses, he argued that the Italian dominance was due to the advantages of an early start combined with continuing innovations that kept Italian silk makers at the technological frontier well into the twentieth century. He also docu-

mented the importance of the silk industry for Italian economic development. It was Italy's first modern industry.

The ecological implications of agricultural intensification were the subject of the final paper by Manuel González de Molina, "Efficiency, Ecology and Intensification in Agricultural Production: Changes in the Work Process: Santa Fe, 1850-1931." He began with an extensive inventory of current environmental problems in Santa Fe that have their origins in the agricultural sector. He then asked whether those problems were the result of mere increase in population density and more intensive use of land. Using a model of ecological interactions he showed that the agricultural system in use in the 1750s was remarkably self-sustaining. It could have been run at a higher level without damaging the environment. He concluded that the sources of ecological damage in the modern economy were new, capitalist, techniques of agricultural production.

In addition to the paper presentations there were two roundtable discussions. Emerging research topics in the economic history of Mediterranean agriculture were put forth by Aymard, Dertilis, Federico, and Postal-Vinay. Carter, Olmstead, Ransom, Rhode, and Sutch described emerging research topics in the economic history of California agriculture. An overarching theme in both sessions was the value of an international perspective on regional development issues. Another point of agreement was the need for close cooperation and continued interchange between U.S. and European scholars. Conferees explored ways to promote collaborative research.

Proposals for further initiatives included cooperation in the collection and standardization of economic and agricultural data, particularly microeconomic data, and plans to hold further meetings on Mediterranean/Californian agriculture. In light of the current outbreak of phylloxera that can thrive on New World root stalks in California's Napa Valley, an international conference on the economic and social consequences of the first phylloxera outbreak was proposed.

*Note: Readers interested in these proposals are urged to write Alan Olmstead, Institute of Government Affairs, University of California, Davis, CA 95616 USA. Copies of the American papers may be obtained by writing the authors. Those wishing copies of either the Olmstead/Rhode and/or Rhode papers should write Alan Olmstead. Copies of the European papers may be obtained by writing José Morilla Critz, Catedrático de Historia Económica, Centro de Estudios Norteamericanos, Universidad de Alcalá, Madrid, España. Requests should specify Spanish or original language version.*

# ECONOMIC HISTORY ASSOCIATION STANDING COMMITTEE ON ARCHIVES

October, 1992

Dear Colleague,

The Standing Committee on Archives was appointed in 1990 at the 50th Anniversary Meetings of the Economic History Association in Montreal to assist Association members with technical issues relating to archives, data storage, and data retrieval. As part of our activities, we ask your assistance in identifying data sources, both in machine-readable and other forms, which are, or soon will be, available to other scholars.

Members of the Economic History Association will receive a copy of our survey form in a mailing in late 1992. We urge members of the Cliometric Society (who are not also members of EHA) to contribute to our efforts. We plan to compile a data source directory which could be made available to EHA members and other interested scholars. We do not intend to compete with such organizations as the Economic and Social Research Council Data Archive (University of Essex) or the Inter-University Consortium for Political and Social Research (University of Michigan). We wish to complement their efforts by informing the community of economic historians of data sets not now being utilized but of great potential value.

If you know of, or have prepared, one or more such data sets you feel would be of wider interest, please advise the Committee by completing our survey form, available from Michael R. Haines, Department of Economics, Colgate University, 13 Oak Drive, Hamilton, New York 13346 USA; e-mail, MHAINES @ COLGATEU.BITNET.

Sincerely,

Economic History Association Standing Committee on Archives

Michael R. Haines, Chair

Ruth Ann Becker	Michael D. Bordo
Joan U. Hannon	Carol Leonard
Robert McMurray	Daniel M. G. Raff

## Call for Papers Eleventh International Economic History Congress Milan, 1994

The Cliometric Society will sponsor a three and one-half hour "C" session at the September, 1994, Milan Congress of the International Economic History Association.

Anyone wishing to present a paper at this session should send three copies of a three-to-five page proposal to:

The Cliometric Society  
Department of Economics  
Miami University  
Oxford, OH 45056 USA

Relevant Dates: April 1, 1993: Deadline for submitting paper proposals  
May 15, 1993: Notification of acceptance of papers

## ECONOMIC HISTORY AT THE EEA

By Jaime Reis (New University of Lisbon)

*(Dublin)* The seventh annual congress of the European Economic Association was held at Trinity College, Dublin, from 29th-31st August, 1992. The economic history session was organized and chaired by Jaime Reis (New University of Lisbon) and was this year co-sponsored by the European Historical Economics Association, founded in Leuven in 1990. In view of the topicality of the theme, it is hardly surprising that a considerable number turned out to hear the three papers presented on "International Monetary Arrangements in Europe: Historical Perspectives."

Marc Flandreau (Berkeley) opened the proceedings by claiming that the example of the Latin Monetary Union contradicts beliefs that the management of a common currency by sovereign states will lead inevitably to the over-issue of money and to inflation. In this case, when silver depreciated after 1873, the independent behavior of the French and Belgian central banks prevented Italy from over-issuing silver coin and reaping the corresponding seigniorage gains. By causing speculative attacks on this money, their refusal to accept Italian coin would drive it back to its country of origin every time, thereby hoisting the Italian authorities with their own petard.

The second case study was that of the Scandinavian Currency Union, 1873-1920, a particularly successful exemplar, which only began to disintegrate after 1914 under the strains of wartime finance and of the need to decouple the issue of notes from gold reserves. It was presented by Lars Jonung (Stockholm School of Economics), Michael Bergman (Lund) and Stefan Gerlach (Brandeis). Sweden, Denmark and Norway, because of their economic similarities and adherence to the gold standard, were able to sustain an arrangement whereby their respective gold coins, as well as their notes and token coins, could circulate at par and indeed be legal tender anywhere in the Union. Not unexpectedly, prices, interest rates and money supply in all three countries behaved very much alike.

The final paper, by Carl Ludwig Holtfrerich (Free University of Berlin), argued that monetary union need not be preceded by political union, as some would have it nowadays in Europe. Because member states were willing to renounce the manipulation of their local monies and accepted common rules for the administration of the common monetary standard, Germany's currency could

be successfully unified well before the creation of the Reich (1871) and the setting up of the Reichsbank (1876), although the supply of money was decentralized and enjoyed legal tender status in all the member states. Important factors in this seem to have been the overwhelming size of one of the member states (Prussia), high transactions costs associated with monetary diversity, and willingness to allow poorer states to replace former gains from seigniorage with generous allocations from other common revenues.

Charles Wyplosz (INSEAD) opened the discussion by asking Jonung and associates whether the fact that the Scandinavian Union could function without a central bank of its own was not simply due to the member countries being on the gold standard and therefore being subject to externally imposed rules. He also cast doubts on the strength of some of the correlations between macroeconomic data series and wondered why the interest rate differentials which did exist did not lead to massive capital flows. June Flanders (Tel Aviv) wanted to know more about the influence of Prussia's political weight in the transition in Germany to a unified currency and whether this was enough to account for the lack of need for a monetary authority above the member states. Taking up a point from Keynes, Lars Svensson (Stockholm) wondered how gold points could be nonexistent between Scandinavian Union countries and yet there could be non-negligible interest rate differences. This point was taken up by several others who failed to understand that there could be a spread of 2% between London and the Scandinavian Union countries when at the same time it was only 1/2% between London and Dublin. Pierre Sicsic (Bank of France) countered this line by reminding the audience of the literature which has sought to deal with 19th-century interest rate spreads in the U.S., where there was a monetary union in some respects comparable. He also wanted to know if the deflation in France after 1873 had been caused by the war indemnity export of gold to Germany, instead of by the restriction in the supply of debased silver coin.

In spite of the able answers provided by the paper givers, the meeting closed under the impression that not only are there valuable lessons in the past for the present day problems of European monetary union, but also that a good deal more could be learned from these and other similar historical experiences.

## ANZ Conference *(continued from page 1)*

regarded as a social science, and business historians (as distinct from historians of business) should apply theories and analytic methods from all social science disciplines relating to history, including organization theory and sociology as well as economics.

Gordon Boyce (Victoria University of Wellington), Peter Burn (Queensland), and Steve Jones (Auckland) delivered papers on business organisation in a session chaired by Pamela Statham (Western Australia). Keith Trace (Monash) was discussant. Boyce used a sample of firms to analyse trends in the organisational development of British shipping between 1870 and 1914. British reliance on intermediate coordinating modes and decentralised administrative frameworks occurred when large-scale US enterprise was developing centralised structures. Such intermediate structures appear to have enabled shipowners to reduce uncertainty *via* informally-communicated incentive systems which internalised asymmetric information flow. Burn's paper addressed a neglected aspect of the shift in the world aluminium industry away from vertical integration since the 1960s. As a first requirement for a non-integrated aluminium smelter in securing a regular and reliable supply of alumina, mechanisms for efficient arm's-length transacting were required. A study of Alcoa of Australia's archives shows that, in broad terms, theoretical predictions are backed by the forms of institutions originally put into place. Nonetheless, many details of contracts, and particularly the dynamics of subsequent changes in contractual arrangements, are not well explained by the theory. Jones then examined the process of concentration in New Zealand industry between 1900 and 1950. He argued that, while the growth in concentration was partly the result of efforts to reap economies of scale and scope by operating in a national market, concentration also took place as firms attempted to reduce competition and extract monopoly profits. Market incumbents were also aided by regulations which raised barriers to new entry.

The final session on the first day heard papers by Keith Rankin (Auckland), Steve Winslade (New England), and Bob Conlan and John Perkins (both New South Wales). Malcolm Tull (Murdoch) chaired the session and Bob Jackson was discussant. Rankin reported on provisional estimates of manufacturing output in New Zealand from 1870 to 1940. Eventually he hopes to produce an annual series comparable with Butlin's for Australia. The provisional series suggests that conventional accounts of New Zealand's manufacturing growth may have to be

modified. Winslade argued that existing estimates of wire fencing investment in eastern Australia before 1914 are inconsistent with the data on wire imports. Local wire production was negligible, and imports of wire were too small to have allowed fencing on the scale shown by the existing estimates for 1870-91. Some notional calculations suggest that both capital formation and GDP growth may have been overstated in this period. The paper by Conlan and Perkins investigated the delayed emergence of a motor vehicle industry in Australia. They argued that the delay was due mainly to tariff policy which, by affording protection to motor-body building and levying only a revenue duty on chassis, stimulated a branch of manufacture that was unlikely to develop toward complete vehicle production.

The early sessions of the second day were commendably well attended in view of the sumptuous dinner the previous evening, the copious supplies of fine food and drink, and the hour at which a noisy and merry busload of economic historians had finally returned to quarters. Mac Boot, Warwick Frost (La Trobe), and Bob Jackson delivered papers to the first session. In the chair was John Anderson (La Trobe). David Merrett (Melbourne) acted as discussant. Boot applied human-capital theory to data on age-related earnings in the cotton industry in the 1830s to estimate the level of investment in skill formation among British workers during the industrial revolution. The age-earnings profile suggests a considerable investment in the skills of the male factory workforce. The widespread notion that the industrial revolution involved de-skilling seems to be inconsistent with the earnings data. Frost investigated how migrants might introduce new ideas and technology into an economy, taking European and Chinese migrant farmers in California and central Victoria in the nineteenth century as examples. He argued that migrant farmers often used ideas or technology that they had picked up after migration. The key part of their intellectual baggage was not the knowledge they already had but rather a tendency to experiment and innovate. He argued further that the transference of knowledge from migrants to the larger Anglo population was not a simple process, for in some activities the Anglo farmers were keen students who rapidly surpassed the migrants, whereas in others the Anglos were loath to follow in spite of high returns. Jackson combined data on life expectancy and income distributions to develop indicators of the inequality of lifetime consumption in England since 1688. There is no evidence that lifetime inequality increased during the industrial revolution, as has been suggested. Inequality of

lifetime consumption probably fell by a little between 1688 and 1867 and by a lot between 1867 and 1970.

Papers focusing on the state and the economy were then given by Garry Goddard (Flinders) and David Hetherington (Curtin) in a session chaired by Ian vanden Driesen (Western Australia). Ken Jackson (Auckland) was discussant. Goddard traced the intellectual origins of the national efficiency movement in Edwardian Britain and examined its impact on public policy. The movement was a reaction against Gladstonian liberalism which attempted to combine imperialism abroad with domestic social reform at home. Hetherington argued that the role of the state in economic development has been ignored by economists anxious to espouse the cause of *laissez-faire*. It is the successful application of principles of management by governments which has determined the direction and rate of economic expansion.

The afternoon of the second day was given over to a downriver cruise to Fremantle and tours of the historic port and the maritime museum. A free evening was passed convivially in a Fremantle pub.

The final day opened with papers delivered by Bob Cage (Queensland), Lionel Frost (La Trobe), and Tony Dingle (Monash). Rabin Ghosh (Western Australia) chaired the session and Simon Ville (Australian National University) was discussant. Cage was concerned with the role economic historians might play in helping to develop public health policies to deal with sexually transmitted diseases. He argued that programs devised for STDs must be different from those for other diseases and discussed the similarities of older forms of STDs and AIDS. A case study of the venereal diseases program in Glasgow after 1900 shows what might be learned from earlier attempts to control STDs. Frost reported on a joint study with Philippa Mein Smith (Canterbury) of mortality rates in Adelaide from the 1880s to 1911. The study uses registration and ratebook data to analyse street-by-street variations in health, population density, and house and lot size. The persistence of high infant mortality rates in poor areas with a high-quality physical fabric is an interesting early result. Dingle investigated the political economy of the building of Melbourne's sewer system. The decision to build was made in the boom of the 1880s but by the time construction started the city was in depression. Ratepayers wanted the project abandoned, but Labor councils wanted it continued, as did the free-trade head of the newly formed Board of Works. Dingle looked at the resolution of this issue, at the fight by unions over minimum wages, at the pressure applied by local business

for the use of local materials and machinery, at the difficulties of raising finance and, more generally, at the operation of a public utility in a time of crisis.

The next session, with John Perkins in the chair and Chris Lloyd as discussant, heard papers from Colin White (La Trobe), Greg Whitwell (Melbourne), and Radha Krishnan and Malcolm Tull (Murdoch). White analysed the role of the enterprise in the transition from a planned socialist to a market-based economy in the Soviet Union and China in the perspective of previous key transitions in the history of capitalist enterprise. He concentrated on the variation under different systems in functions characteristic of the enterprise, in the degree of autonomy, and in the incentive system governing the behaviour of management and workers. He also investigated the extent to which differences in these areas were related to structures of ownership, cultural backgrounds, and environments of risk. Whitwell drew on governmental and Australian Wheat Board archives to examine the controversy surrounding wheat sales to China in the 1960s. The AWB negotiated sales on credit to China at a time when Australia did not recognise the Chinese government and regarded China as an enemy nation. Whitwell showed how political controversy impinged on the marketing efforts of the AWB and discussed the episode in the context of the independence of the AWB and more generally in the context of the relationship between politics and trade. Krishnan and Tull traced the evolution of resource use and environmental management in Japan over the past century. Japan has been seen as having had a 'growth at all costs' strategy which has given a low priority to the environment. Krishnan and Tull argued that an understanding of Japanese policy involves a recognition of the conditions under which development took place, particularly the pressure of a large population on a small land space. They also examined policy changes following the emergence of pollution as a major issue in the 1960s.

In the afternoon session Gang Deng (Flinders) and Harry Wu (Adelaide) gave papers on China and Radin Fernando (Australian National University) a paper on Java. Deng addressed the question of China's failure to develop in the modern period after having enjoyed an earlier technological and economic supremacy. He argued that the Chinese pattern of production and the mechanisms to safeguard and reinforce this pattern blocked China from further development. With this structural equilibrium, China became overwhelmingly conservative, particularly at a grass-roots level. Wu presented revised

estimates of urban population and urban-rural migration in China, 1953-89; which challenge previous estimates by both Chinese and western scholars. Urbanisation and migration were shaped by central planning and by China's industrialization strategy in the early part of the period. Market-oriented economic reform since 1978 has been reshaping patterns, but it is still not possible to say that China has returned to a normal track of development. Fernando argued that the labour force of colonial Java became more diversified between the 1890s and 1930 than has previously been thought. Important factors in the change included the weakening in the subsistence peasant economy, the commercialization of agriculture, improved communications, and an associated increase in urban activity. The session was chaired by Jonathan Pincus (Adelaide) with Reg Appleyard as discussant.

Shortage of time meant that excellent papers by Frank Broeze (Western Australia), Alfons van der Kraan (New England), and David Merrett were published but not delivered. In tracing the development of Australia's merchant marine since 1788, Broeze emphasized contextual elements: Australia's topography, its climate and natural resources, and its political economy which determined that labour costs would be high. These factors, plus an international climate unfriendly to Australian shipping enterprise and a lack of domestic capital, limited the Australian merchant marine to the coastal trade even in its heyday. Competition from other transport modes and high port charges have now reduced the industry to insignificance. The paper by van der Kraan analysed the relationship between indigenous power holders (rajas) in pre-colonial Bali and foreign business people (bandars). Though keen to assert control over foreign trade, the rajas farmed it out to foreign merchants who paid an annual rent and gave political support in exchange for extensive rights to trade, to establish monopolies, and to collect trade duties. The bandars were therefore not simply harbour masters but trade farmers. Merrett examined contemporary and later claims that collective action by the Associated Banks of Victoria in April 1893 could have saved the Commercial Bank of Australia and also prevented the subsequent closure of many banks. He argued that an attempted rescue would have resulted in an implosion of the system. The failure to establish an industry-based system of prudential oversight or lender of last resort facility was impeded by the smallness of the local market, the constitution of the local clearing house association, and the rivalry between banking institutions.

A general meeting then received reports from the

president (Schedvin), treasurer (Trace), secretary (Anderson), and the editors of the society's journal (Jonathan Pincus, Adelaide, and Snooks). The meeting thanked Mel Davies and the Department of Economics at the University of Western Australia for their efforts in organising the conference. This had been the best-run conference people could remember, with stimulating sessions and memorable social occasions. The society's next conference is scheduled for 1994 at the University of New England. Graydon Henning has undertaken to organise the meeting and knows he will have his work cut out to match this one.

The conference culminated with the A.C. Davidson Lecture delivered by Tony Wrigley (All Souls, Oxford). Speaking on energy supplies and living standards in the past, Wrigley argued that, until the industrial revolution, economic growth had been circumscribed by the energy available as an annual flow from organic materials. When people succeeded in gaining access to a stock of energy in the form first of coal and then of oil, it became possible for annual energy output to exceed the annual flow of organic inputs. For the first time, poverty became problematic in the sense that it could now be ameliorated by political and social action instead of being an inevitable part of the human lot. The lecture rounded off a splendid conference in fine style.

### **Call for Papers Social Science History Association**

The 1993 annual meeting of the SSHA will be held November 4-7 in Baltimore, Maryland. Proposals for panels and papers should be submitted to one of the program co-chairs by February 15, 1993. Organizers of panels are encouraged to submit preliminary proposals earlier.

Program Co-Chairs:

Eileen McDonagh, Department of Political Science,  
Meserve Hall 303, Northeastern University, Boston,  
MA 02215. Phone: 617-495-8140; FAX: 617-495-  
8422; e-mail: EMCD @ NUHUB

Philip J. Ethington, Department of History, Boston  
University, 226 Bay State Road, Boston, MA 02215.  
Phone: 617-353-2551; FAX: 617-353-2556

## Jones Interview (continued from page 6)

the basis of development indicators. There simply aren't aggregate statistics on income for early periods. The second perception is that with growth nudging up more than once, it is more interesting to inquire what kept getting in the way than to hypothesize some new historical force as causing it. None of this means that I think growth was, or is, 'easy', just that it was a little easier than is suggested by an historiography which traces everything of interest to our profession back to a zero point in the British industrial revolution, and no further, or nowhere else. The book perhaps cuts off too early in time to induce people in the profession to read it. It deals too much with faraway places and early periods.

### What is your reaction to the reaction to the two books?

The reaction illustrates one of the sociological features of the profession I was talking about when I said that beginning scholars can unfortunately make a bigger splash by providing a clever amendment to the established corpus of work than by doing something original. *The European Miracle* seems to be congenial to a lot of people because it's an ordered compendium which extends by a little bit what they already know, or think they need to know, about the Rise of the West. Plenty of people start their courses with a general introductory topic on the Rise of the West. That's fine. The book gets a good initial run and people can move on to more serious things.

When the idea of *Growth Recurring* came to me a lot of things started falling into new places. As Susan Watkins said when she launched the book, it was like shaking a kaleidoscope and getting a completely different pattern out of the same bits and pieces. A student had asked me a question about Japanese growth and I realized I couldn't assimilate that to the Europeanist, Western conventions about the origins of growth. So I started from the other end, considering the proposition (which I'm sure is congenial to economists) that most people would like to get rich. Providing you can introduce a compositional principle, like the invisible hand, you can go from there to assuming that growth is in principle a normal condition. This is based on what's called an Elemental Human Strategy. Admittedly, approaches in that Enlightenment vein are now being eroded by the historical contingencies approach which has invaded the social sciences. There's a book of essays coming out on that topic; Geoff Hawthorn's new book, *Plausible Worlds*, asserts that the Enlightenment program has ended; and so on.

But supposing one does take the economist's brutal view, that people like to escape from their poverty, then the question is, what's stopping them? I blew this up to the society level. I looked at history in terms of growth. (I didn't look at it in terms of industrialization; I'm not interesting in train spotting as such, only in whether people get more to eat and shoes for their kids). As soon as I looked at history I found that the record strongly suggests there was real growth in at least a couple of East Asian cases, and probably transiently in all sorts of other cases, as well as in the Rise of the West. When I put these two things together I had the basis for changing the approach from that in *The European Miracle*. I put the emphasis, not on new features which suddenly emerged as laser-beam miracles in modern European history, but on the gradual release of constraints in a number of societies, and the closing down again of those constraints. Working through the constraints suggested in the 'obstacles to growth' literature led me to think that the basic problem was rent-seeking—the neurotic compulsion, through the ages, of people with political power to try to take more out of the pot than they put in. In terms of constraining growth, that will do it every time!

There's a great difference between the two books. The fact that the second one hasn't caught on anything like the first, has been kindly reviewed but no more, is an unfortunate reflection of the bias towards reading what will extend the current paradigm, but not toward absorbing a lot of obscure data to challenge it.

**Did *Growth Recurring* fail to catch on because we as economic historians don't know very much about countries outside Europe and North America?**

You think / do? How do / know about those places? I went to the library!

**Why isn't more work being done on these areas?**

Start-up costs are too high.

**Is it simply a matter of investment?**

Yes, the start-up costs are so high, and the literature is not congenial to people with training in economics because it's so vague. It is difficult to know how you would teach this material, in the sense that you teach undergraduates about Lancashire cotton. Early Asian history, or even early European history, is like trying to pin the clouds down. You don't know anything to start with about the third century B.C. you don't know any ancient Greek

history and, when you come to read it, you can't find out the things you really want to know. It's hard going. It leaves a lot very speculative and that's not our mode, is it?

Our mode is to narrow the questions and get determinate answers within a particular intellectual framework. It's not surprising that the bias of the subject is towards modern, Western, national economic history, and even finer slivers than that. But I don't think ours is the way to start teaching people. It doesn't give them a context. You see, our method of teaching, our intention, seems to be to teach people technique and maybe how to debate, but not to give them a broad context. I'm talking about graduate training, or honours level training in Britain and Australia. The assumption is that as undergraduates, or at school, people got all the history and geography and sociology and bits about cultures they could eat, so that all they need are courses which show the cut and thrust of debate about social savings from the railroad or whether or not slavery was efficient.

**If it is a matter of incentives, how do we in the discipline change the incentive structure to get more**

**work out on non-Western economic history?**

I think, oddly enough, heretical though it may be, that ideas will change the incentive structure. I think you don't change things by telling people what you want them to do, you just notice that bright people coming into a given trade pick up on new ideas. There are some new ideas around. The thing will self-correct. The whole New Economic History revolution was precisely this. It was bright people in economics departments (you couldn't handle it in history departments). It was exciting and new and the people were highly trained. They were pretty bright people at first, anyhow, so they read the general books too. Many people in the field actually know, not merely more than they write, or more even than they teach, but much, much more. Somehow I think a few people from outside, perhaps from comparative historical sociology, and a few inside, like Doug North or Paul David, will attract more of the bright minds, and things will change in half a generation. There isn't much sign of it at the moment, but I'm relying on a 'Quebec Effect' once the change comes.

At the annual meeting of the Economic History Association in Boston this past September, the Trustees of that organization created the Jonathan R. T. Hughes Prize for Excellence in the Teaching of Economic History. A committee of Lou Cain, David Mitch, and Sam Williamson was appointed by Moe Abramovitz, President of EHA, to raise an endowment for the prize. The Committee solicits your support.

Contributions should be sent to:

The Hughes Prize Committee  
Department of Economics  
Northwestern University  
2003 Sheridan Road  
Evanston, Illinois 60208 USA

Checks should be made payable to the  
"Economic History Association."



## NBER Report *(continued from page 12)*

cannot be attributed to a shift from agricultural to non-agricultural activities. Farmers were more likely to retire because of physical demands of their occupation, while opportunity cost was more important to non-farmers than physical requirements in the decision to retire.

The remainder of the dissertation session took place the following morning. Boris Simkovich (Harvard) discussed his research, "Intergenerational Mobility in Late Nineteenth Century America." He uses the National Panel Study, a sample of 10,252 men aged 5-14 and 25-34 from the 1880 census linked forward to the 1900 census. About 40% of the men were successfully linked. Maximum likelihood profit analysis was done to determine the probability that an individual in the 5-14 year age cohort would have had a white collar occupation in 1900. In the tradition of mobility studies begun in the 1960s, early results point to achieved white collar status in 1900 as positively related to father's 1880 occupation as professional, managerial, clerical, sales or skilled manual, to urban residence, to residence in the Northeast, and to greater school attendance. It was unrelated to immigrant status or migration between censuses.

The final dissertation research report was by Alan Taylor (Harvard) on "Argentine Economic Growth in Comparative Perspective." A puzzle of modern economic history is Argentina's failure to sustain modern economic growth. Three phases of Argentine growth are identified: pre-1913 with high rates of capital formation financed by capital imports, especially from Britain; 1913 to the 1930s, characterized by low savings rates (originating, in part, from high dependency rates) and low rates of capital formation; and the 1930s to the 1950s, with an inward-looking import substitution policy resulting in very high relative capital goods prices and consequent low rates of investment and saving. A counterfactual exercise concluded that if Argentina had had U.S. or Canadian dependency ratios in the second period, its savings performance would have improved by two-thirds of its difference from the U.S. and Canada.

The final morning began with a paper by Richard Steckel and Jayanthi Krishnan (both of Ohio State), "Wealth Mobility in America: A View from the National Longitudinal Survey." The paper uses a sample of 2,163 households from the NLS (Parnes) survey of Older Men and 1,779 households from the NLS survey of Older Women. These data followed households from the mid-1960s to the mid-1970s. The authors conclude that study of wealth inequality faces serious biases from use of

cross-sectional data, since cross sections do not allow for mobility. A substantial share of NLS households moved within the wealth distribution between the 1960s and the 1970s. Single individuals, persons whose marriages terminated, and blacks did less well, while those who remained married, who stayed in the South, or who had skilled jobs and/or high levels of education did better. Comparisons with Steckel's earlier work on the 1850s suggest that, with the exception of rates of movement out of poverty, households were relatively less mobile with respect to wealth in the later 20th century.

Robert Margo (Vanderbilt) gave the last paper, "Employment and Unemployment in the 1930s." Recent research on labor markets during the Great Depression has shifted emphasis from aggregate data to disaggregated time series and to microeconomic evidence. Several important questions have long been suggested: why did high unemployment persist in the 1930s and why were real wages stable or rising over the decade in the face of such unemployment? Also, why did the behavior of real wages *vis-a-vis* unemployment change from counter-cyclical for 1929-1932 to pro-cyclical for 1932-1940? Some new research questions the older unemployment rate and nominal wage data. Macro studies have not, in general, allowed us to distinguish between the traditional wage-rigidity model and newer rational expectations models (*e.g.*, Lucas and Rapping). Time series disaggregated by industry (*e.g.*, the work of Bernanke) or micro data on firms (*e.g.*, the work of Raff and Bresnahan on the automobile industry) have helped us to move beyond the "representative firm" paradigm and recognize the importance of heterogeneity in determining the behavior of observed aggregates. Similarly, the model of the "representative worker" is questioned by using new micro and disaggregated data sets, such as the 1940 U.S. Census Public Use Sample. Heterogeneity of the unemployed, which was less true around 1900, was increasingly important in the 1930s and helps explain some of the puzzles. Other new micro data sets, such as the 1934-36 budget survey and several labor/industry surveys for Philadelphia in the 1930s, were mentioned. New research on the issue of added versus discouraged workers in the 1940 Public Use Sample was also brought forward.

*Note: A catalog of papers presented at NBER Summer Institutes will be available from NBER later this year. Copies of DAE Summer Institute papers included in the NBER working paper series may be obtained from the NBER. Copies may also be obtained from the authors.*

## ESRC Report *(continued from page 14)*

captured the size of the foreign trade sector. It would be desirable to combine stages one and two of Irwin's analysis by constructing a measure of trade-sensitive employment. Baines remarked the results must be influenced by the vast majority of cotton workers not having the vote. Woodward commented that the paradoxical sign on cotton was another manifestation of Lancashire's anti-Irish feeling. Offer drew attention to the comparable Canadian "reciprocity" election of 1911.

Adam Klug won the award for the most original introduction, posing the counterfactual: If a latter-day Hitler were visiting the IMF to request balance of payments finance and, in the long lift journey upwards, found himself in the company of Paul Krugman and Peter Kenen, what might they find to talk about? The answer was "debt buybacks," a policy which all three advocate(d). The usual problem with the policy is that purchase of own debt raises the price, lowering the welfare of debtors and raising that of creditors. That result, however, turns on symmetric information, a condition that Klug was able to test by archival investigation. He concluded that most buybacks were undertaken in the US because the US, having a positive trade balance with Germany, had less incentive to retaliate. Joachim Voth (St. Antony's, Oxford) suggested a different story. The Nazis had announced they were going to abolish "debt slavery." After Hitler came to power, debt repurchase was therefore only a small offset. From German cabinet data, he also questioned Klug's 1932 repurchase figure. Nicholas Dimsdale (Queen's, Oxford) remarked German policy was the opposite of contemporary British policy, which restrained capital exports in order to build exchange reserves.

Till Geiger (Belfast) looked at British defence expenditure between 1948 and 1964 with three hypotheses: the trade-off of military expenditure against civilian investment, once and for all displacement or distortion of the economy by the Korean War, and overcommitment by which defence absorbed excessive R&D and skilled manpower. He found little evidence of a trade-off between investment and military expenditure but did identify an initial overcommitment of resources to the production of arms and a Korean War effect. Jag Chadha (LSE) remarked that 1964 was a good terminal date for the analysis because the Common Defense Procurement policy was introduced after that date. He suggested that NATO figures for defence were more standardised than the Blue Book numbers (which include

pensions). He would have liked more discussion on the precise transmission mechanisms postulated. Animated discussion took place on whether it was possible, necessary, or desirable to measure the benefits of defence as well, or whether the paper should stick with the costs.

David Higgins (Sheffield) examined the determinants of profitability in Lancashire textile firms between 1948 and 1960 using unbalanced panel data. Were larger spinning firms more willing to adopt modern technology, ring spindles in particular, the answer to Lancashire's problem? Bolton firms tended to employ mules for fine yarns and Oldham used rings for coarse. Controlling for these effects, Higgins found plant size was a significant determinant of the adoption of ring spinning. In general, greater profitability was not the reason for ring spinning, though for the Lancashire Cotton Corporation it was. He concluded that whatever these firms did, they could not have matched labour costs in the Far East; they were only staying on in the industry until their capital was fully depreciated. Francesca Carnivale (LSE) questioned this conclusion by referring to the lessons of the Italian textile industry which did manage to compete.

Morris Perlman's project originated in an attempt to confront theory with data in the bullionist controversy at the beginning of the 19th century, but looking at the data had diverted him. Three years after the suspension of gold convertibility in 1797 the exchange rate on Hamburg began falling, and it was claimed the price of commodities rose. Ricardo could be seen as a monetarist, and Thornton and Malthus as "wets," in this debate on whether monetary conditions were the sole influence on exchange rates. In the course of the debate a distinction began to emerge between the real and nominal exchange rate on which Perlman focused. Export data were the main problem for 97% of manufactured exports; there were no price indices. Irving, the Inspector General of Imports and Exports, produced price data which were misleading. Perlman constructed terms of trade indices for South Europe, USA and North Europe and found that only in North Europe was there apparently any relationship among the variables. He noted his study had been constrained by data limitations, and his requests for assistance collectively exposed delegates as less informed than they should be about sources of economic information during the Revolutionary and Napoleonic Wars.

George Kouretas and Dimitri Georgoutsos (Crete) examined the stability of floating exchange rates in the 1920s using the Johansen technique, which uses

information from the dynamics of a relationship and is therefore more effective than the Engle-Grainger method. They considered the tendency towards purchasing power parity for three countries, the US, the UK and France, between 1921 and 1925, using monthly data. Anindya Banerji (Wadham, Oxford) maintained that at least 120 observations were necessary to test for long-run equilibrium relations; therefore, the sample was not large enough to draw any inferences. Foreman-Peck wondered whether that problem might be circumvented by "stacking" the equations of the three countries with slightly different specifications. Turvey and others raised questions about the appropriateness of the price indices. Georgoutsos replied that such data deficiencies were the reason for not imposing on the equations the symmetry constraint implied by theory.

Max Schulze (LSE) addressed the problem that existing quantitative measures of Austrian engineering in the later 19th century were inconsistent with the qualitative evidence. He employed wage bill data from the Hapsburg social insurance scheme to construct a new output index. The result showed a very severe depression from 1872, from which recovery was not complete until the end of the 1880s. In the following two decades, growth was very fast. Output was heterogeneous but consisted primarily of railway equipment and agricultural machinery. This second group was targeted on low-value items salable to Eastern Europe that were not in direct competition with US products. The course of sugar beet subsidies influenced the demand for machinery and therefore the prosperity of the industry. In a trip down memory lane, Roderick Floud (City of London Polytechnic) remarked on the instability of the input-output ratios employed to construct the final series. Annual fluctuations were implausible and stemmed from price movements, for Schulze used quantity inputs and value outputs.

James Sefton (Cambridge) offered hope to authors of "strangely neglected" papers by basing his revision of UK GDP growth rates since 1948 on a publication of half a century earlier by Stone *et al.* Their method for reducing measurement errors in a composite index based on a number of series, by optimizing subject to an accounting identity, made excessive computational demands at the time it was formulated. GDP is estimated both from expenditure and income sides. For 1976 the discrepancy between the estimates amounts to about 4% of GDP. The output measure is believed to be more accurate in the short term and the expenditure series better over longer periods. Sefton represented short-term unreliability by a high

contemporary random error and long-term reliability by a high autocorrelation coefficient. Reliability of the revised GDP estimate was enhanced by 50%, and GDP growth rate was lowered by about 0.2% *p.a.* Dimsdale suggested that a conclusion derived from the OLS formulation, in which the component series were inversely weighted by their error variances, would be more readily understandable than the maximum likelihood treatment adopted by Sefton. Turvey suggested that the chainlinking problem in constructing the new series might be addressed by abandoning Laspeyres in favour of a more suitable formula.

Martin Weale invented a method for establishing whether the Bursar was in College on Friday afternoon, and the timeless world of Oxford defeated attempts on Saturday morning to raise conference productivity above civilised norms. Next year's meeting at York will be organised by Kate Watson.

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## Canadian Report *(continued from page 10)*

volatility. Since the influence of imports on price volatility depends on the parameters of the import supply function, they build a model of the French wheat market and estimate the supply function. With some reservations they conclude that the volatility was not affected by trade. Trevor Dick (Lethbridge), the mail-in discussant, suggested the authors include some details on the raw data. He also asked how changes in volatility of world wheat prices could be incorporated into the model, and concluded that the mixed results of the estimation may reflect problems with the data. Harley suggested that the 'mixed results' may reflect flaws in the model, in particular a failure to model the world wheat market correctly and how it changed in the second half of the 19th century.

Preliminary plans were laid for the next conference. Mary MacKinnon and Rick Szostak will coordinate the programme, which is tentatively scheduled for March 1994 in Montréal, P.Q. [Province de Québec, Pays de Québec??] Papers will reflect two broad themes: using the new Canadian national income accounts—a tribute to Mac Urquhart's extension of the national income accounts back from 1926 to 1870—and new directions in Canadian economic history; well, new directions.

# CALL FOR PAPERS

## 1993 CLIOMETRICS CONFERENCE

The Thirty Third Annual Cliometrics Conference will be held at Northwestern University, May 14-16, 1993. The Conference will be hosted by Louis Cain, Joseph Ferrie, and Joel Mokyr.

Support has been received from the National Science Foundation for the 1993 Conference. The Cliometric Society will be able to pay most expenses for the majority of the 50 participants, as it has in recent years.

Relevant dates for those who wish to attend the conference are:

Paper Proposals and Requests for Invitations Due	February 1, 1993
Invitations Mailed to Paper Presenters	March 8, 1993
Other Invitations Mailed	March 15, 1993
Complete 20-Page Papers Due	April 5, 1993
Conference Books Mailed	April 26, 1993

All members of the Cliometric Society will receive the call for papers with their December membership renewal letters. Any member who wishes to attend the Conference should request an invitation by writing to the Conference Secretary. Proposals for papers should be three to five pages in length. Please send three copies of the proposal to:

The Cliometric Society Conference Secretary  
Department of Economics  
Northwestern University  
2003 Sheridan Drive  
Evanston, IL 60208 USA

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