Report of the Economic History Association Conference

By Pamela Nickless, UNC-Asheville, and Michael Haupert, UW-La Crosse

The Economic History Association held its 60th annual meeting in Los Angeles from September 8-10th. The theme of this year's meeting was "The American Century." It consisted of twelve sessions, held in six concurrent blocks, two plenary sessions, a dissertation session, and for the first time, a poster session. The local arrangements were deftly handled by Lance Davis, Philip Hoffman (both Caltech) and the UCLA troika of Naomi Lamoreaux, Kenneth Sokoloff, and Mary Yeager. They arranged for beautiful southern California weather and managed to talk the public transportation union into delaying their strike until after the meetings.

The conference began with a session entitled, "Racial Inequality and Economic Progress," which opened with "Sources of African American Economic Progress in the Labor Market in the Twentieth Century" by James Heckman (University of Chicago) and Petra Todd (University of Pennsylvania). Heckman began the presentation by outlining the different views of economic progress presented in the literature. The authors wonder if government policies matter, and if so, do they make things better or worse? They focus on the different stories told by mean and median non-white/white wage ratios, finding that the growth of government played a major role and that specific interventions impacted favorably on wage rates. The role of the Rosenwald Schools is mentioned as evidence for increasing the quality of workers through intervention, underlining the importance of social activism.

William Collins and Robert Margo (both Vanderbilt) presented the second paper, "Race and Home Ownership: A Century's View." Using the census IPUMS data to analyze home ownership and housing values, the authors find substantial convergence in the relative value of black and white housing since 1940. Collins and Margo use a two logit probit model (one for home ownership and one for value of owner-occupied housing) to distinguish between changes correlated with the relative characteristics of the black and white populations and other variables, such as the extent of residential segregation and the impact of riots in the 1960s. In both cases the "gaps" were not entirely explained by the relative characteristics of the population. One interesting result was the impact of riots. While the gap in housing values narrowed rather unevenly over time, it widened in cities that had riots in the '60s.

(Continued on page 22)
Executive Director’s Notes

Greetings Gentle Members:

Once again it is time for the annual Report on the Cliometric Society. As required by the bylaws of our Society, your director is prepared to submit the report, as approved by the trustees, to the membership. Before revealing the details, I note that it has been brought to my attention that not all members of the Society take the same keen interest in the annual report. For those members whose imaginations are not fully captivated by the administrative side of the Society, I have prepared a short version of the report: I cashed the checks and paid the bills.

For the rest of you, let’s begin with membership. We currently have roughly 400 members. I say “roughly,” because several members, perhaps one might even say many, do not seem to renew on a timely basis — where timely means within epsilon of some date $t$, such that $t$ is less than 365 days from the date on which they are billed for their annual dues. We’ll meet at the home office will continue to do our part to encourage stray members to return to the flock, and we hope you will do likewise.

Moving on to organizational changes, since Sam Williamson announced his retirement, the trustees have been working on the allocation of responsibilities in the post-Sam era. One change along these lines is a clear separation of powers and responsibilities between the voting and ex officio members of the board. Henceforth, only elected members of the board will be voting members.

Also, in an effort to strengthen our ties with other institutions and organizations with which Clio is affiliated, the board has added four ex officio trustees: the former director, the Society’s EH.Net representative, a representative to EHES, and the editor of the newsletter. Sam Williamson (Miami-Ohio) is the former director; Rick Steckel (Ohio State) will be our EH.Net rep.; Steve Broadberry (Warwick) will be our EHES rep; and, of course, Mike Haupert (Wisconsin-LaCrosse) is our trusty editor. They will join your current director and Eugene White (Rutgers), the editor of Explorations in Economic History, as the ex officio contingent on the board. With the exception of the EEH editor, all ex officio appointments are for four years.

As for our finances, below is the Society’s annual budget. It looks like we’ll be able to keep the lights on for another year.

Finally, please be sure to check out the Clio sessions at the 2001 meeting of the Allied Social Science Associations (January 5-7) in New Orleans. Once again, we thank Kyle Kauffmman and Gavin Wright for assembling the program. Also, there will be a party from 8:00 to 11:00 PM on Saturday January 6 hosted by Mike “Disco Boy” Haupert in the Monteleone Hotel. The exact location will be announced at the Clio sessions. I look forward to seeing you there.

Lee A. Craig,
Executive Director
### 2000 Calendar Year Budget Report

**Projected Income**
- Dues – Regular: $6,540
- Dues – Students: 100
- EEH Subscriptions: 14,105
- EHES Dues Collected by Clio: 4,270
- Donations: 1,425
- Interest and Other Income: 90
- **Total Income:** $26,530

**Projected Expenses**
- Salaries: $3,000
- Newsletter: 4,000
- Academic Press: 14,105
- Clio Member Dues: 1,525
- IEHA Dues: 175
- Director’s Travel and Trustees Meeting: 1,000
- Bank and Credit: 450
- ASSA Meetings: 1,000
- Establishing the NC State Office: 650
- Other Expenses: 350
- **Total Expenses:** $25,940

**Projected Balance:** $590

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**Call for Papers**

**The Cliometric Society 2001 Annual Conference**

The annual Cliometrics Conference in 2001 will be held May 18-20 in Tucson, Arizona. The **deadline** for proposals and requests to attend the meetings is **February 1st, 2001**. Those wishing to present a paper should provide a 3-5 page summary of the proposed paper. They will be notified by March 1, 2001 and are expected to provide a completed draft of the paper in the proper format for the conference volume by April 2, 2001. Paper presenters and those wishing to attend the conference should provide their addresses, phone and fax numbers, and email addresses. We prefer that applicants submit their materials using the proposal submission form under the Cliometrics conference listing at http://www.eh.net/Clio/Conferences/prop_01.html. Proposals may also be sent to:

Lanna Miller  
Cliometrics Conference Secretary  
Department of Economics  
University of Arizona  
Tucson, AZ 85721 USA  

Telephone: 1-520-621-2821  
Fax c/o Lanna Miller: 1-520-621-8450  
E-mail: lmiller@bpa.arizona.edu
Report of the All-UC Group on Economic History Conference
By Dan Bogart, Joe Ryan and Matt Wiswall; all UCLA

From April 28-30, 2000 the All-UC Group on Economic History gathered at UCLA for a conference on "Families, Households, Kin, and Networks in the Economy."

Alex Strating (University of Amsterdam) opened the conference and the session on networks and the growth of markets with his paper, "Kinship, Family, and the Flower Trade in a Dutch Community." Strating examines the Dutch flower trade in the town of Rijnsburg and the success of small family firms, known as lijnrijders, which compete successfully with large companies. He attributes the competitiveness of the small firms to kinship, which provides specialized training, access to capital, and greater loyalty and flexibility. Moreover, Strating suggests that the influence of kinship networks extends beyond the interactions within the family to the social organization of the community.

In response, Deirdre McCloskey (UC-Riverside and UIC) suggested that kinship served as a substitute for formal accreditation. She also suggested that the topics of traditional interest for anthropologists, such as the influence of society, speech, and solidarity, have important implications for economists who are interested in profits, prices, and the profane. Naomi Lamoreaux (UCLA) and Ann Carlos (University of Colorado-Boulder), asked about barriers to entry and the degree of competition between traders, while Jean-Laurent Rosenthal (UCLA) questioned the application of theoretical models of reputation in open systems such as the flower trade.

In the same session, Claire Lemercier (CRH-EHESS) presented "Families and Non-Kin Networks in Parisian Economic Institutions: The Chamber of Commerce, 1803-1872," a study in which she emphasizes the importance of distinguishing between different dimensions and levels within families and networks, such as the difference between networks and interest groups. Lemercier finds that members of the Chamber of Commerce valued the diversity of its networking structures and that the principal aim of family strategies was the extension, rather than the use, of the network. Furthermore, she argues that by the end of the 19th century the interests governed by industrial sectors were replacing family interests in the Chamber of Commerce.

The discussant, Phillip Hoffman (Cal Tech), questioned the strategies of individuals, firms, and families who entered the Chamber. He asked whether information was being transferred within the Chamber, perhaps to enhance the supply of credit, or if the chamber served as a vehicle for lobbying. Lamoreaux stressed that the high turnover within the Chamber suggests evidence in favor of a policy-based approach to the Chamber rather than reputation and credit.

Timothy Guinnane (Yale) began the session on "Fertility and Families" with a discussion of fertility transition in Bavaria, work conducted jointly with John Brown (Clark). They challenge the findings of the European Fertility Project, which claims that the decline in fertility was caused by factors other than adaptation to changing economic conditions. In contrast, Guinnane and Brown argue that although in Bavaria religion and secularization were important factors in the fertility transition, economic and structural (Continued on page 15)
An Interview with Samuel H Williamson

Sam Williamson is the recently retired Executive Director of the Cliometric Society and former editor of the Society’s newsletter. Sam taught for many years at the University of Iowa and was a visiting professor at the University of British Columbia, U C-Berkeley, and the University of Sydney. Since 1983 he has been Professor of Economics at Miami University, where he is currently Executive Director of EH.Net. Our interview was begun in Los Angeles at the EHA meetings in September 2000, by Lee Craig and Mike Haupert, and was continued by John Lyons at Miami in October.

Why did you decide to retire as executive director of Clio and editor of the Newsletter?

The simple answer is that it was time to move on. As EH.Net expanded, it became clear we were spread too thin. It was also clear to me that we were getting burned out on trying to publish a good newsletter every four months, along with all the other things we did. I told the Board of Directors that I wanted to step down and asked them to consider whether or not they wanted to continue the Society. To be honest, I was not sure if there was still a role for the Society. Obviously, others felt there was, and it is gratifying to me that the Board was able to appoint you (Lee Craig) as Executive director and that Lee recruited you (Mike Haupert) to continue the Newsletter. I’m also pleased that Kyle Kaufman has taken over organizing the Clio sessions at the ASSA meetings and that Price Fishback is now doing most of the organizing for the annual Cliometrics Conferences.

You have been associated with Cliometrics almost since its beginnings, haven’t you?

Almost. As far as the conferences go, the first one I attended was in 1963 as a first-year graduate student at Purdue. It was just the third Clio conference.

What led you into economic history?

Well, the better question is what led me into economics. When I was a senior in high school, sputnik went up, and we were all supposed to go away to school and become engineers. Even before that, I’d always been technically minded and thought engineering was what I should do. That’s probably why I ended up going to Purdue, which was the largest engineering school in the world at that time, and probably still is. So I started taking engineering courses; some of them didn’t agree with me and others did. However, when I got a chance to take my first elective and since my father was an economics professor, I took an economics course. I enjoyed that a lot more. As a
result, I thought I'd switch my major to economics. My father wasn't too sure that was a good idea, so he sent me to talk to a faculty member he knew there, Jonathan Hughes, I stopped into Hughes's office, and he said, "Sure, you should become an economics major, and in fact, you should join our honors program." So after taking a couple economics courses and doing much better than engineering, I switched to economics. When I became a senior and tried to figure out what I was going to do with my life, some of my professors suggested that I should stay on and go to graduate school. It was as much as telling me what to do, and since I knew that if I went and got a job I'd be drafted right away anyway, I ended up in graduate school.

OK, that gets you into the economics graduate program. How then did you move on into economic history? Was it Hughes's influence or otherwise?

Economic history was very important at Purdue at that time. Hughes had recruited Nate Rosenberg, who had been at Oxford with him, and he recruited Lance Davis, who had been an undergraduate with him at Washington, studying economic history with Doug North. Duncan McDougall was also there. There was a core of guys who were interested in historical questions. But that wasn't all. It wasn't just exciting in economic history; the whole department was an incredible place. Among others were Jim Quirk and Stan Reiter in mathematical economics, George Horwich in macro, R. L. Basmann in econometrics, and Vernon Smith, who was beginning to talk about experimental economics (which was regarded as kind of a strange sideline thing). We graduate students thought this was an interesting bunch of people, but we had no idea how what they were doing was being received by the general profession. We took a full year of economic history. It was required of all graduate students at Purdue, and I got interested in it and actually did an independent study with Lance Davis trying to formalize a model of Doug North's regional model from his 1961 book, *The Economic Growth of the United States, 1790-1860*. I set up a linear programming model to see if we could indirectly measure GDP based upon census measures of the factors of production and some sort of input/output coefficients. It was an interesting exercise, but I was not sure that anybody would believe it when it got done.

That didn't lead to a dissertation did it?

No, I was thinking about doing a dissertation extension of this; I wanted to study trade between the North and South with Hughes. I planned to go to the archives in the South and compare the hypothesis in North's book with that of Albert Fishlow. Fishlow had published an article stating that the Midwest didn't really ship that much food to the South, because it all went down to New Orleans and was re-exported. However, I got sick and had to cancel my trip. I was also interested in macro, so I ended up doing my dissertation using econometric techniques to test the amount of interest elasticity of saving in a macro model with primary and secondary financial markets. I was really more of an econometrician/macroeconomist coming out of graduate school.

But outside Purdue, you weren't regarded that way, were you?

No. When I went on the job market, I had a macro/econometric dissertation, but people treated me as an historian — I guess the Purdue reputation preceded me. People kept asking questions about Purdue and their economic history program. And since I had been involved with the Clio Conference, I
would be identified; and people would ask me what I could teach; and I would say, "Well, I can teach economic history" because I'd had so much. By then Clio was second nature to me; everybody did it, and it was certainly not controversial at Purdue. Even though I tried from time to time not to be an economic historian, fate dictated differently. It was funny in the job market. I remember somebody asking me what I thought of this new work by Robert Fogel, and I said, "Oh yes, Bob Fogel, I know him quite well." The guy says, "What?" I said, "Oh yes; he comes down to Purdue all the time to these conferences." Again, anyone at Purdue was very familiar with all the new young cliometricians who were revolutionizing the field at the time.

After I took the job at Iowa, I started doing various economic history and cliometrics projects involving the application of indirect measures and theory to various questions. For example: was the South self-sufficient (with Bill Hutchinson)? was there an active coastal trade in the colonies (with Jim Shepherd)? and what was the national income before 1929 (with Joe Swanson)? But I did want to get back to macro policy questions and did a few papers on employment tax credits, which then piqued my interest in whether social security had an impact on labor supply. That got me further interested in the potential crowding out effect of social security and into the debate with Feldstein on what the impact of social security was. I then became interested in looking backward to figure out what the counterfactual world would have been if we hadn’t had social security. What was the world of pensions before social security? I’ve been dabbling in that ever since.

Back to the Clio conferences. Where did the term “cliometrics” come from?

It was coined by Stan Reiter, who worked with Lance Davis and Jon Hughes on a paper presented at the 1960 Economic History Association meetings titled, “Aspects of Quantitative Research in Economic History.” Reiter was searching for a word that described the quantitative economic history work they were discussing. As a joke, he suggested joining the muse of history "Clio" and the suffix "metrics" from the word econometrics. They defined the term in that article. Since that publication, the term has evolved: a good current definition is that cliometrics is the application of economic theory and quantitative techniques to describe and explain historical economic events. You need to understand that this was a period when Doug North was telling economists that there was a "revolution under way in economic history" ... a "new economic history." But of course it couldn’t be "new" forever, and over the years another term was needed. There are possibly better words for what the field has become, such as "historical economics," but cliometrics has stuck with its current meaning and the field with its name. What began as a joke now appears formally defined in major dictionaries and encyclopedias.

How did the conferences themselves get their start?

The first Cliometrics Conference was held at Purdue in 1960. The original organizers were Lance Davis and John Hughes, with help from Duncan McDougal and, later on, Nathan Rosenberg. Purdue received a grant from The Ford Foundation, and Stanley Reiter received some of that money to sponsor a workshop in mathematical economics. Davis and Hughes liked the format of the math group and felt that quantitative economic history was equally deserving. Thus, the first Clio meetings were financed and patterned in the same form as
the mathematical economics group.

The Clio conference seems to have branched out from their exclusive Midwestern origins.

The Conference continued annually at Purdue throughout the decade of the '60s. During this time, it was called "The Purdue Conference on the Application of Economic Theory and Quantitative Techniques to Problems of History." Informally, it was called "The Purdue Cliometrics Society." By 1969 all the original founders had left Purdue: Hughes went to Northwestern, McDougall to Kansas, Davis left for Cal Tech, and Rosenberg to Wisconsin. Purdue had tried to replace them by hiring Joe Swanson, Lewis Solomon, and Jim Shepherd; but by 1969 only Shepherd was left, and people at both Kansas and Wisconsin had expressed an interest in taking over the Conference. The decision was to go to Wisconsin, which at the time had a large and active group in both its economics and history departments. The first sessions were organized by Ralph Andreano and Jeff Williamson, who were later joined by Peter Lindert, Claudia Golden, and others. By this time, the Conference was being financed by the National Science Foundation. By 1979, the Wisconsin group thought it a good idea to have a change, and Don McCloskey took over the Conference and moved it to the University of Chicago. When McCloskey took a job at the University of Iowa in 1981, Clio went along. McCloskey and I ran the Conference for the three years from '81 to '83, and in 1984 it moved to Miami University. With a couple of exceptions when I was on leave, I have been the Principal Investigator on the sponsoring NSF grants ever since, even though the Conference itself has been held at many other institutions in the last 15 years.

You must have found the early meetings quite interesting.

What I remember in general is how exciting things were. There was a lot of give and take, a lot of criticism, but a lot of useful suggestions, too. For example, in 1963 Eugene Genovese was giving a paper about food costs in the antebellum South, and an issue came up about the slaughter weight of hogs. I gather he thought that Southern hogs would have been very skinny because, in contrast to the North, there was not an abundant supply of feed corn, and they were just foraging in the woods.

Is that where the oft quoted "What about the acorns?" query comes from?

Probably. This issue was part of the larger debate on Doug North's hypothesis on internal US trade patterns; that the Midwest sent food to the South, which sent cotton to New England, which sent manufactured goods to the Midwest. Al Fishlow had questioned whether the food that was going to New Orleans really went to the South or was exported to the North or Europe. So if the South was not getting food from somewhere else, could it have been self-sufficient? The question of the slaughter weight of pigs evolved from this discussion. So at this point, I think it was Bill Parker who asked "What about the acorns?" If the pigs were running wild in the woods, they may well have been feeding on the plentiful acorns to be found there. If so, they would gain more weight than otherwise thought and provide more food for the humans; hence the South could be self-sufficient in food. The original question was raised more than 30 years ago, and this is still an ongoing string of research. Today Fogel and John Komlos, among others, carry it on in their focus on nutrition in anthropometric history.
Hughes often wondered whether we would ever get it right the first time. Do we?

By rephrasing a question, it is often possible to look for a more definitive answer. Clio in many ways encouraged more precise, rigorous, and testable questions, which led to the use of new data, better theory, and improved conclusions. Controversies have just as often been widened as solved, but the argument has become more rigorous. One of the most common innovations of early cliometric work was the application of price theory. As North pointed out, in all the debates about the burden of the Navigation Acts, a cliometrician was the first to consider what the elasticities of demand may have been. We have come a long way in the last 40 years and, for example, when you read a book such as Atack and Passell, you can see the incredible stock of knowledge that cliometricians have added just to United States economic history.

A unique feature of the Clio meetings is the absence of discussants. Was it always that way?

The format evolved from the first meetings; the idea was that papers were circulated in advance, and there was a lot of discussion. At Wisconsin, they tried having assigned discussants but, as I remember, it did not work too well.

How did the five minute limit for presenters get put into place?

We realized the value of discussion, so we just weighted the time that way. NSF really liked this technique, which has been copied since by other conferences. Clio became well known for that style. It’s successful because the rules are known. I’ve tried it at pension conferences I have organized, but if the participants aren’t used to it, they have trouble with the format. It succeeds for Clio because everybody knows the rules and comes prepared.

What is the status of the Cliometrics Conferences today?

The Cliometrics Conference is regarded by the NSF as one of the most successful conferences they support. A good part of that is due to the format that we developed. In the fall, we circulate a call for papers that are in the formative stage; we ask that people not submit finished work or papers that have been given so many times already that the marginal value of the discussion will be low for the author(s). Eleven or twelve are asked to present and each must have a draft (limited to 24 pages) to the organizers by March. In addition, 35 to 40 others are invited as participants. The papers are reproduced and mailed to everyone who is to attend, with the clear understanding that all the papers will be read before the conference starts. With few exceptions, the conferences have been held on university campuses in smaller midwestern cities, where distractions have been minimal and the group stays together for the entire three days. I must add that the Cliometrics Conferences have never been sponsored by The Cliometric Society. I always made every effort to keep the two separate because the Conference was funded by the NSF, and I never wanted it to be thought that one had to be a member of the Society to come to a conference.

How is the participant list determined each year?

Alas, as I have often said, we created a system where we pay people to come to the conference, not vice-versa. As a result, instead of taking in money, we only pay it out. So obviously, we cannot invite everyone who wants to participate. I have
probably gotten most people upset with me at least once. It’s important to get the right mix of newcomers, senior scholars, and graduate students. The veterans are needed to keep up the history and discussion. Newcomers are needed to provide new blood, and students need to be able to meet with the senior scholars in an intimate, nonthreatening setting. These contacts are invaluable to them.

Is that true today?

I think so, especially the World Congress, because of the global contacts that are made. In Montreal this past summer, the Russian scholars told me how important it was to them to be able to meet some of the folks there. It has fostered a feeling of equality in allowing people to speak and not put on airs. It’s a good atmosphere. It’s one of the reasons I stuck with it so long. We’ve got a good bunch of people, which encourages the younger generation. We need to because we’re a small fraternity, and if we don’t make the newcomers feel welcome, then we won’t survive.

Has the tone of the Clio meetings changed? Are they tamer and more civil?

Less flamboyant, that’s for sure. Probably more civil as a result. Those young Turks who made them flamboyant are now the “senior citizens” of the profession. There were some famous battles and a few instances when feelings were hurt, such as the debates on *Time on the Cross* in the mid-1970s. But for the most part we have been fairly apolitical. We don’t put down work because we disagree with someone’s politics, which might not be said of some other groups.

It seems that in more recent years there has been some light-heartedness mixed in with the serious scholarly business, such as the annual report from the mullah. Where did that come from?

It started in 1987 at Illinois. Barb Sands’ data set was the topic of discussion, and at one point, I think she said, “I guess I’ve opened a can of worms bigger than the universe.” I was taking notes on the sessions to write the summary for the *Newsletter*. I immediately noted the quote and thought it was worthy of some award that evening. Others heard some version too, and Tom Weiss really ran with it. That evening at the banquet, he presented Barb with a small box of worms; he was disappointed not to be able to find a can, but he had gone out and dug up some worms. A few weeks later, I got an “anonymous” document in the mail and enjoyed it so much that I published it in the *Newsletter* with the conference write-up.

There’s also the famous “Can Award.”

That started innocently enough when we were out to dinner at an Italian restaurant in Cincinnati. My colleague, Dan Seiver, noticed the Clio olive oil can on a shelf on the wall and pointed it out to me. Well, I had to have one. I asked the maitre d’ if he could get me one, and at the end of the meal, he gave me one that had been opened from the bottom. I mounted it on a wooden base, and at the First World Congress (May 1985), Lou Cain and I decided to present it to McCloskey for "contributions to Clio." It had a humble origin. McCloskey forgot to take it home, and it spent the year in Evanston. The next year, McCloskey began the tradition, at our insistence, that the recipient return to the meetings to pass on the can to another worthy recipient. Richard Sutch got it in 1986, and he put a plaque on it and made a to-do at the Champaign meetings when he presented it to Joel Mokyr. It has now had 16 recipients, and who knows how
long it will continue. I have asked some of
the other recipients if they put receiving the
can on their vitas and most have laughed.
How can a chairperson take seriously that
you have been awarded an old, empty olive
oil can? McCloskey once suggested we have
an annual president (who I guess would then
have to give a speech) and perhaps fellows of
the society. I was not in favor of this, and I
am glad we have not done it. The more
structure and honors, the more we would
become a "discipline". The risk, then, is that
the stakes become higher and that our
activities are influencing decisions of
university administrators. As it is, we define
ourselves at our meetings, and I think that is
the way it should be.

What led to the First World Congress of
Climetrics?

By the early 80s, it seemed appropriate to
promote an international meeting so that
scholars from outside North America could
come and interact with our group. We
decided to have a World Congress in the
Spring of 1985, meeting at Northwestern
University because Joel Mokyr offered to be
co-organizer with McCloskey and me and
because its location near Chicago's airport
would reduce costs. There were 90
participants, some 20 from overseas. The
Congress lasted three days instead of the
usual two. The participants decided that the
Congress was quite successful and that we
would have another as soon as I could
organize it.

How did the Climetric Society come
about?

It was in the Spring of 1983 that McCloskey
and I felt that, after 23 years, it would be
valuable to form an organization that kept
track of who was doing climetric-type work
and to have a newsletter to keep everyone up
to date on what was happening among our
group. Over the years, the organizers of the
Conferences had accumulated a list that had
been used to mail out a call for papers each
year. In September of 1983, we sent a letter
to everyone on this list announcing the
formation of The Climetric Society. As I
remember, there was a list with three to four
hundred names, many who had not
responded to the call for years. Names were
on that list because they may have given a
paper to the group at one time; they were a
member of an allied group such as the
Economic History Association or Business
History Conference; or they had been
identified as fellow travelers in some other
way. We also placed announcements in
several journals inviting interested people to
join. The response was slow at first, as one
might expect, as it was necessary to establish
the credibility of the organization. In the
first year, we had 275 people pay $3.00 on
the promise they would receive a Newsletter
and a mailing list of self-identified
climetricians.

The most recent Newsletter was 44 pages
long. What did it look like when you
began?

The first Newsletter, Volume I, Number 1,
came out in the fall of 1985. It was just two
pages long. It had a report on the minutes of
the World Congress with a membership list,
talked about giving discount subscriptions to
EEH, and had some "classified ads," which
was an idea I had that maybe we could get
people to sort of advertise to trade for what
they wanted. It also had a copy of John
Hughes's World Congress speech as an
insert. The next Newsletter had a report on
the Canadian Clio meetings, which they
called C2 at that time. (Some people blamed
me for that expression; I know I called it that,
but maybe somebody else had before me.)
There were a few more classifieds and
announcements, too. And we kept bringing it out every 4 months, always looking for materials. We were soon getting reports from the British "Clio" (which was called the Quantitative Economic History Study Group), a workshop sponsored by the ESRC, and we continued to look around for more conferences of other fellow travelers.

Then I also asked for invited articles. We got some really nice ones for those early issues. For example, Lance Davis and Stan Engerman wrote a piece entitled, "Clio is Alive and Well in More Places than Oxford, Ohio," and Bill Parker mused on "Economic History Since 1933: A Search for a Story." In addition, we began to publish the abstracts of the conferences, so that those who didn't attend would know a little more about what went on.

In 1987, the Society began sponsoring sessions at the Allied Social Sciences Association meetings (most people know this as the American Economic Association meetings). I remember that, at the time, the Economic History Association didn't want to do sessions at the ASSA. I tried to fill the economic history void there and contacted the secretary of the AEA, saying The Cliometric Society wanted to sponsor sessions. It took us a couple of years to get on the program; nevertheless, the first time was December 1987, and we have had sessions at ASSA ever since (which we have reported on in the Newsletter).

The Newsletter has been published approximately every fourth months from 1985, and I was the editor from then to the October issue of 1999. Since I cannot spell and probably am a bit dyslexic, I am not a good person to be an editor by myself. However, we were helped by great assistants: starting with Lois Nelson from the first issue to 1990, a few others briefly, and then from 1992 to last year by Debbie Mörner. I also could never have continued this long without the assistance of Associate Editors, John Lyons (who joined officially in 1989) and then Lou Cain in 1991, when I was in Australia.

When we started the Society I had no idea that 15 years later we would be where we are. We now have an organization with about 400 members worldwide. We publish the Newsletter three times a year and have two meetings a year: the annual conference, which meets each May and has been supported by the NSF for most of the last 24 years, and our sessions at the ASSA meetings. It is impressive to me that so many excellent people have come forward to continue the various functions of the Society.

How did the idea for the interviews originate?

I was probably swimming when I thought up that one — and if I knew that some day I would have to be answering these questions instead of asking, I might have reconsidered. We were trying lots of things to fill the Newsletter, and I became aware that the origins of our field were worth preserving. The original participants were often reminiscing about the "good old days" of flying into Lafayette in small planes, being stuck in snowstorms, etc. These stories were always enjoyable at the banquet during the conference, but not the important reason for the interviews. It was my idea to have people talk about their early work, their memories of how it was aided by the Clio conferences, and whether it was hard to get it published. We also asked for their impressions of what is the current conventional wisdom on these issues today.

Why didn't Clio ever start a journal, or at least publish an annual proceedings?
In a sense, there was really no need. There was a time when I’d pick up EEH or JEH and see that two-thirds of the papers had previously been presented at a Clio conference. It used to be the first shot at getting an article published. I'm not sure if it was because people thought it was that important or because the feedback was so valuable. I tried to get EEH to be the Clio journal, but it didn't work out quite that way. Arthur Cole started EEH as Explorations in Entrepreneurial History, but it lapsed; then Ralph Andreano picked it up. When Gary Walton was editor, he “gave” it to Academic Press.

How did EH.Net and Economic History Services evolve from what you were trying to do early on with Clio via the Internet?

Part of it was my personal fascination with gimmicks and electronic stuff as well as being involved with computers from the early 80's, when networks on campuses were becoming popular and we were sending documents from one computer to another. It’s sort of natural, from cliometrics being a technical thing and cliometricians being worried about collecting data and how to transcribe it and my own personal interest. As soon as there was a network like Bitnet, which then broadened into the Internet, I set up a Cliometric Society list where people could subscribe and share information. I then set up a directory of research papers and a gopher (which was a way of sharing files) that allowed an early directory of Clio members to be searchable. When the Worldwide Web started, I was quick to want to join in and take advantage of every new technology that came along, so we set up a web page. Next, I applied to the NSF to get support to install a server and was successful; we got a machine, and I was able to hire people to do design work on web pages, etc. And it just kept expanding.

It has been my philosophy that the information on the Internet useful to economic historians would evolve into a combination of the "thousand points of light" of individuals with their own pages and of commercial sites controlled by publishers. The former would be hard to find, and the latter dictated by what would sell. My vision included a third source that would be web servers sponsored by the professional organizations. EH.Net is now organized, with a board of directors appointed by our sponsoring organizations, and I think we have been somewhat successful in our goal. The last time I checked, we were receiving about 180,000 hits a week and storing something like 22,000 pages of information on the EH.Net server, with our reviews and the archives of our lists, etc.

You’ve given a pretty glowing report of Clio. Are there any downsides? Could you paint a rosy counterfactual picture about what the world of economic history would be like if there had never been a Clio revolution?

The acceptance of cliometrics has had its costs. Within economics departments, cliometricians have fought to have equal status with other applied fields. We claim to be equally capable of teaching an applied econometrics course and of using NSF money wisely. Unfortunately, economic history has become regarded as only another applied field, no longer one of the three legs of Schumpeter's stool but another field that it would be nice to have (if the department could afford it). When it comes time for promotion and tenure, the rest of an economics department may not appreciate the difficulties of working in the archives or, for that matter, of even working in a library. The cliometrician's work is judged on the basis of what the rest of the department
knows—the theory and quantitative tests used. What is clearly missed in these comparisons is the important distinction between cliometricians and other applied economists. While they often use the same models, and sometimes even the same data, the cliometrician is primarily interested in explaining historical events. While the applied economist is concerned in finding (almost any) data that will make his model work, to the cliometrician the failure of a model can be as important and as useful as a success. In fact, the cause of a failed model may be the far more interesting result.

One final question. It seems that the name Williamson is heavily over represented in the literature of economic history. Is that a family tradition?

I can't be blamed for all of that. My father, Harold F., was one of the founders of both the Economic History Association and the Business History Conference. It has never been my plan to try to follow in his footsteps, and it is just as well since I think he helped edit his last book, perhaps his tenth, when he was close to 80 years old.

Jeffrey and I have been good friends since we met at a Clio meeting in the '60s. We have concluded we might be related on our mother's side.

References:


Genovese, Eugene, "Livestock in the Slave Economy of the Old South: A Revised View," *Agricultural History* 36 (July 1962), 143-149.


effects also were crucial. They conclude that the use of smaller units of analysis, finer measures of possible determinants of fertility, and more appropriate econometric methods contribute to an adequate test of the alternative theories.

Richard Easterlin (USC) responded with a lively commentary on the paper and the current status of the fertility transition debate. Easterlin asked that the authors consider the decline in mortality simultaneously with the reduction in fertility and that they compare the quantitative results to more contemporary studies of less-developed countries. Easterlin contends that the current guise of the demand model is in need of overhaul if we are to make significant progress toward an accepted explanation for the fertility transition.

The Friday session concluded with "Connections Within and Between Households in Rural Liaoning, 1789-1909," by James Lee (Cal Tech) and Cameron Campbell (UCLA). Campbell presented the paper in which economic links between households are examined by analyzing data on first marriage and reproduction. Specifically, the authors use data from eight population registers and apply event-history techniques to argue that the characteristics of individuals and immediate kin had important effects on marriage and reproduction, while the characteristics of first and second cousins were only important if they co-resided. Furthermore, Campbell and Lee show that the possession of purchased titles by senior kin improved the chances of marriage and reproduction only if they co-resided. They conclude that there is little evidence of economic connections between households in the same descent group.

On Saturday Eric Jones (Berkeley) presented "Wives, Whores, and Concubines: Early Modern Dutch Marriage Law and the Transmission of Family Wealth in Asia." He examines the laws relating to the property of Dutch men who died intestate and who were married to Asian women. Jones observes the social and economic relationships the Dutch authorities wished to perpetuate: Dutch policy granted the same legal status to Asian as to Dutch wives as part of a larger goal to establish a more permanent settler society in Asia.

In response, Zorina Kahn (UCLA) suggested that Jones examine more closely whether
Asian women who already had high status in Asian societies actually gained status through marriage to Dutch men. Carlos asked for more information about the history of the marriages and the legal status of children. McCloskey wanted Jones to compare the case of Dutch colonies in Asia to other European colonies, such as those of the French in Canada. Rosenthal commented that the relative importance of Dutch marriage laws could be measured by comparing the marriages in areas where Dutch control was more complete with those where Dutch authority was more mitigated by Asian customs.

In their paper, "Wealth Accumulation in France, 1800-1940: Individuals and Dynasties," Jerome Bourdieu (INRA-Lea), Akiko Suwa-Eisenmann (DELTAParis), and Gilles Postel-Vinay (INRA-Lea and EHESS) use data collected from family histories to study the effects of uncertainty on the transmission of wealth from parents to children. The authors find that information on the age of death of the parent, valuation of savings, age of retirement, and the variation in family strategies helps to more fully explain the pattern of intergenerational wealth transmission and, thereby, the changes in inequality observed during industrialization.

Richard Sutch (UC-Riverside) observed that the present data is limited to wealth at death, which may not coincide predictably with wealth during the life cycle. He suggested the authors acknowledge that changes in mortality and income distribution affect inequality independently as well as through intergenerational transfers. Giovanni Federico (University of Pisa and UCLA) asked about changes in the inheritance laws during the period, and Carlos suggested that the authors expand the study to include family strategies that involved grandchildren and other dynastic considerations.

Gillian Hamilton and Aloysius Slow (both University of Toronto) gave the final presentation of the session, "Class, Gender and Marriage." Hamilton and Slow use parish records from 18th-century Quebec to study the relationship between male and female fecundity and marriage rates. They conclude that because women had shorter periods of fecundity and were therefore relatively more scarce in the marriage market, they were able to achieve greater social mobility than men.

Ruth Bloch (UCLA) thought that models of marriage must consider other functions of marriage in addition to reproduction. As an example, she offered the possibility that the exit of postmenopausal women from the marriage market was not because of their inability to reproduce but because of the physical undesirability of older women. Bloch argued that the ability of women to hold property may also have influenced the marriage decision. Lamoreaux thought that the perspective of the women should be considered, such as the potential to gain from marrying wealthier men.

The next session began with a paper by Carolyn M. Moehling (Yale), "Family Structure, School Attendance, and Child Labor in the American South in 1910." Moehling uses the 1910 United States federal census to investigate the differences in school attendance and labor force participation rates for black and white households. She finds that children who lived apart from one or both parents tended to have lower rates of school attendance and higher rates of labor force participation. She also asserts that racial differences in family structure accounted for about 6 to 14 percent of the racial gap in school attendance and between 5 and 12 percent of the racial gap in the labor force participation of children.

In response, Kathleen McGarry (UCLA)
proposed that Moehling use the 1900 census to augment the results from the 1910 sample and that Moehling consider more carefully the endogeneity of family structure. She noted that the same factors that caused families to break up could also have lowered school attendance and raised labor force participation. In addition, Sutch commented that labor market discrimination, which lowered the returns to education for blacks relative to whites, should be considered. Suwa-Eisenmann observed that the attitudes of children toward schooling are influenced by the attitudes of the adults present in the household.

Next, Gloria Main (University of Colorado-Boulder) spoke on “Portioning Children in Colonial New England: Origins of the Child-Centered Family?” Main uses a sample of wills from colonial New England to study intergenerational transfers, of family resources and argues that as population density increased, New England parents gave greater control over family land to sons to encourage them to remain on the family farm.

Carole Shammas (USC) argued that other factors, in addition to the availability of land, must have been important. Furthermore, Shammas wondered whether New England families actually were “child-centered” or if they were simply less patriarchal. Daniel Vickers (UC-San Diego) commented that the line between the age of ascension into adulthood was blurred in colonial communities since adult children often worked for their parents. Rosenthal questioned the circumstances surrounding the writing of the wills, such as whether the child given the majority of land bequests was living with the parents at the time.

The final paper of the Saturday session was by Julie Zissimopoulos (UCLA), “Siblings and Siblings-in-Law: How Far Does the Family Extend in the Allocation of Resources?” Zissimopoulos uses the Health and Retirement Study to examine the time and financial transfers of adult married children to their elderly parents. The author contends that although the amount of transfers decreased with the number of siblings, the marginal decrease was small. Zissimopoulos finds that the major determinants of transfers were distance between children and parents and relative financial status.

Gary Richardson (UC-Irvine) emphasized the important policy implications of Zissimopoulos’s study for government programs for the elderly and suggested that Zissimopoulos acquire data that would supplement the mostly categorical information on the amount of transfers. Roger Ransom (UC-Riverside) stressed the importance of the health of the parent in determining the extent of intra-family transfers, while Sutch conjectured that the data might be systematically biased: children may have over-reported their own generosity and (possibly because of a lack of knowledge) under-reported the transfers made by their siblings.

The Sunday session began with a paper by Russell Court (UCLA), "Business Adolescence: The Education of Foreign-Resident, Commercial Agents: Antonio Brignole, 1554-1573; Giulio Rapallo 1581-1583; Gio Francesco Brignole, 1593-1594; Simon Sorba, 1573-1574." The paper follows the educational and professional training of four young Italian merchants who were employees of Antonio Brignole's banking and shipping firm. These junior merchants worked in a foreign subsidiary of the company, gained experience, and established contacts beyond the immediate kin group. Court asserts that the networks created by the four agents and others like
them contributed to the success of the company in the 16th century.

Frederico commented that since the paper only focuses on the education of the merchants and the functioning of the network, the reader is left to wonder how representative the sample is. Frederico further suggested that Court consider the difference between network-based kin groups and other types of kin groups, the level of competence the young merchants were trying to acquire, the advantages for the parent firm in supporting the training, and if possible, how the young men felt about their work. Lamoreaux maintained that the author presents kin and non-kin relationships as alternatives, when it is possible that kin/non-kin networks are complements. She further asserted that if the strategy of the company was to expand the reach of the family business, it may have succeeded by reaching out via foreign subsidiaries to non-kin partners who it could then monitor.

In their paper, "Purchasing Strategies: Case of the Royal African Company," Ann Carlos, Ron Smith, and Yongmin Chen (University of Colorado-Boulder) consider the choices the Royal African Company (RAC) faced in purchasing intermediate goods for production. Their empirical analysis indicates that the company purchased from more suppliers when it had higher demands and purchased relatively more from a supplier with whom it had a longer relationship, a purchasing pattern broadly consistent with what would be predicted from optimal purchasing strategies under relationship-specific investment and incomplete contracts.

John Majewski (UC-Santa Barbara) commented that an important aspect of the paper relates to incentives: the supplier has the opportunity to behave badly, but the RAC has the chance to do the same. As a result, reputation becomes important for both parties involved, because if a company engages in opportunistic behavior with the RAC, it will suffer the consequences. In addition, its reputation will suffer among firms in the same field. Kahn asked about inventory costs and production methods, and Lamoreaux suggested that the authors look closely at the purchasing side in Africa to uncover hidden relationships.

Maurice Aynard (Ecoles des Hautes Etudes Paris) presented the final paper of the conference, "Networks, Information, and Decisions at the Court of Versailles (1680-1720)," which relies on the journal of the Duke of Saint-Simon to study the laws of the Court. Jan De Vries (Berkeley) asked about the "innocence" of the primary document. Is it an objective description or is it the obsessive vision of Saint-Simon? Furthermore, he questioned whether the Court was an economic institution, wondering what the output of the Court actually was. Lamoreaux inquired about the role of women in interpretations of personal perspective. In particular, would a female informant have had a different view? Aynard responded that Saint-Simon relied on women for information but was not concerned with their point of view. Mary Yeager (UCLA) replied that Saint-Simon's vision of women and use of women is an indication that they are not being accurately described in the memoirs. Aynard acceded the weakness but also stated that researchers have yet to find a good way of uncovering the answer to the question.

The All-UC Economic History Conference will next convene April 27-29, 2001 in Emeryville, California. For more information, please contact:

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A Letter from the Mullah

Le Franglais est Morte, Vive le Franglais

D'habitude au printemps, les penseées du Mullah tournent à l'Ohio – pas à l'amour. Mais cette année, le printemps est devenu l'été, et son attention est allé au nord – à Montréal! Vive la différence!!

C'était incroyable, but the Mullah had arrived at this year's site of the Clioms' annual rite as eager as ever. After all, this was the international version of the annual spring rites. Each year at the domestic rites, those whose native tongue is allegedly English spew forth so many seemingly wise sound bites that the Mullah could only imagine the barrage of pithiness that would emanate from the worldwide body of Clioms assembled in Montreal. In past years, the international constituency proffered a disproportionately large number of prize-winning mottoes. Le Frenchmen whose name is not misspelled twice has often been in the running and has won with such insightful twaddle as, "French data are too beautiful to be true." And, more importantly, he would be in attendance, along with the young German maximmacher who won recently for the brilliant, "Think hard before crossing your fingers."

And, if the Mullah's memory serves him correctly, which is not always the case, the infamous can holder who would be present this year had come on strong at the end of last year's meeting. A year ago he thought, "The problem with looking at the details is that they just serve to confuse." And he rhapsodized about the proper thing to do with tropical fruits. Surely he would continue on a roll, not to mention make a memorable presentation of the next clan member to be canned.

Wisdom or not, the proceedings had overtones of "Survivor" – the most popular show in the history of television – and something that could cut into attendance at the annual rites. On "Survivor," people tried to connive and choose their fellow participants in order to win mere money. In Montreal, the prize was far greater – immortality – the opportunity to produce such intelligent froth that it would be inscribed forever in the great little book of wisdom preserved, one thinks, on the Clioms' sacred grounds in Ohio.

One Cliom looked very much like those on "Survivor" as he almost walked off the set while spewing forth. He who was recently subjected to up close and personal treatment by a website wandered back and forth, dans les deux sens, across the seminar room, his path getting wider and wider with each turn. The Clioms being so attuned to quantification had made some rough calculations on the spot that indicated had the session gone on for another five minutes (give or take seven minutes), his path would have extended out the door.

As it turned out, the Mullah came up with only a short list of sayings. Perhaps the Mullah found himself in "the other session" on those occasions when pithiness was flowing in the other. Or perhaps the strains of the jazz festival mellowed out the participants. Or the Mullah knew that he would be heading off soon after the climax of the rites pour une rendez-vous en Fiesole et une grand tour de Tuscany and so would be unable to prepare the usual
comprehensive report. Whatever the case, despite the large number of Clioms in attendance and the enormous diversity, not to mention the ethnic rivalries that turned up the heat a notch now and then, there was less wisdom per capita to be heard.

As usual, much of the wisdom was too personal to endure as universal, timeworn truths. The award for aphorism of the year, as everyone knows (or should know by now), goes to the adage uttered in the heat of battle that contains wisdom for all time and place. And, above all, it must be pithy enough to be easily remembered and to fit in a reasonably small space in the great little book of sayings.

Thus, it may be true that "personal experience with robustness is not a good thing," as she who is organizing runs on banks all over the world claims, but it is not something likely to confront most of the Clioms (or anyone else for that matter). Nor is it the case that many Clioms could agree with the bow-tied scholar from the wolfpack tribe who alleged that "a coauthor is like a tub of butter."

The brouhaha had its usual assortment of allegations, but these too rarely contain that element of universality so crucial to success. The terrapin who was not very enamored of his own paper asserted, for example, "that law I don't know about, and am not sure when it was passed, was more important." While one of the recent McCloskeyites undermined the universality of his own aphorism, "We believe in data; post-modernists don't." Does that mean the Clioms are not postmodern? Sacre Derrida! as they might say in Montreal.

The regional bits of wisdom were far fewer this year. Nevertheless, one member of the scarlet Jersey tribe informed us mightily that "Europe is not just England; there are other places."

So we are down to the Final Four, a metaphor that many think makes much more sense now that Coach Roy has chosen not to leave the land of the Jayhawks.

Another member of the scarlet Jersey tribe claimed, "Les Etats-Unis est petites pommes de terre!" ("The US is small potatoes"). That may very well be true in the long scheme of things, but try telling that to the Australian swimming team or any resident of Idaho. And if it's true, why did so many Irish migrate to the US?

The former Keynesian Quaker who recently moved South also tried to characterize American society by stating, "Dans la violence Américain, quelqu'un est tué; mais dans la violence Canadiennes, les sentiments de quelqu'un sont endommagés."(In American violence, someone gets shot; but in Canadian violence, someone's feelings are hurt"). The first part of that seems beyond dispute to those in the films of Sam Peckinpah or Quentin Tarantino but what of those who stay at home and watch the NHL or WWF on TV? The latter part of the phrase, however, would be pretty difficult to assess, eh? The Mullah had considered visiting Prince Edward Island, but his reading of the collected works of L. M. Montgomery (Anne of Green Gables and all) revealed it to be too violent an area for him. And, the Mullah could not bear to step on the feelings of he who resides an derrière du Mont Royal by immortalizing this brutal pithiness.

The quasi-bicoastal member of the wildcat tribe of the Southwest asserted that "Quelquefois,
c'est meilleur faire-ca en arrière." Stated that way, it has universal appeal, even though it took several bottles of wine and late night conversations with waitresses to get it right. The fuller version, however, which goes, "I like to do things backwards, because sometimes backwards is the way to go," loses some of its appeal with the personal element. But if we take only the second part, "Sometimes it is better to go backwards," we find a grain of truth. What a valuable piece of advice this is, something that in and of itself is a deep thought. If nothing else, it should turn any predictive science on its head; it has the additional merit of taunting policymakers and politicians. Had this been known, one can easily imagine that the advertising gurus at General Electric would not have come up with their slogan, "Progress Was Their Most Important Product." They might have realized their most important product was light bulbs or toasters. The most tantalizing aspect of this aphorism is that it runs against the grain of some state mottos. Indeed, it may very well have been one of the alternative mottos considered in one or more states.

The winning phrase contains the sort of wisdom for which the Clioms can only hope. It not only contains wisdom, it is dans la mode cliometricienne and McCluskeyish to boot. And it was uttered by she who is unsure about robustness. "If you stick in something insignificant, it is still not significant." Or, in the local dialect, "Si vous insérez quelque chose insignifiante, c'est pas toujours insignifiante." With her apparent expertise in robustness, one can only imagine that she knows what she is talking about. But, what if you stick in another insignificant thing? and another? et une autre? et une autre? et cetera et cetera? Can something insignificant ever become significant? Would Anna or the King of Siam know this? And, how many insignificant things can dance on the head of a pin? The wisdom leaves unresolved the consequences of sticking in something significant, but the situation would seem pregnant with possibilities.

Enfin, he who is named after a great, classic motorcycle rose to the occasion to pass on the immortal and beloved Clio Can. His selection was a fine one, indeed, although it presaged the normal Olympic gymnastics judging in which geographic preferences are revealed. Nevertheless, and without further urine testing, he who resides au derrière du Mont Royal sera le détenteur de boîte avant que nous ne nous rencontrions de nouveau au Miami.

Submitted humbly by the
faithful and obsequious servant of the Mullah

Niagara Falls, River and Gorge, from Victoria Park, Canada  c1913
EHA Conference (continued from page 1)

Indeed, the decade of the 1970s saw a decline in the quality of housing, calling into question whether the riots were a symptom or a cause of deteriorating housing.

"Institutions and Economic Growth" featured three papers, the first being "The Colonial Origins of Comparative Development: An Empirical Investigation," by Daron Acemoglu, Simon Johnson (both MIT), and James Robinson (Berkeley). They provide not only a theory of why different countries have different institutions, but a way of measuring them which does not suffer from endogeneity problems. They focus on economics that were colonized by European countries between the 16th and 19th centuries. In particular, they look at differences in state institutions that depended crucially on settlement patterns. Using data on the mortality of settlers as an instrument for current institutional differences, they show that institutions are a major determinant of differing income levels.

Stephen Haber, Armando Razo (both Stanford), and Noel Maurer (ITAM) presented "Credible Commitments and Economic Growth Under Political Instability: Evidence from Revolutionary Mexico." They describe a theory of how credible commitments are possible under conditions of political instability and then test it with quantitative evidence drawn from both archival and published sources from Mexico during the period 1900-1934.

Next, Cynthia Taft Morris (Smith College) spoke on "World Capitalist Growth Patterns: The Myth that Neoclassical Growth Models Apply Worldwide." An increasing number of cross-national studies of macroeconomic growth that pool data on developed and underdeveloped countries seek to explain world growth patterns with a single model and propose universal policy prescriptions for market reform. Morris questions the generalizations about growth, convergence, living standards, and economic policy typically applied to underdeveloped countries. Using little known historical cross-country estimates, she demonstrates that the consequences of capitalist market expansion vary so greatly across development levels and paths and institutional settings, that no single set of theory-based policy prescriptions is applicable.

The session on "Values and Economic Growth" began with a paper by William Easterly (World Bank), "The Middle Class Consensus and Economic Development." Easterly began by showing some slides of the developing world and quotes about class polarization. His question is simple: "Why are some so rich and some so poor?" The answer, however, has proven to be much more difficult to determine. His model links the existence of class and ethnic polarization to exogenous country characteristics like resource endowments. Using a three stage least squares model, he finds that higher shares of income for the middle-class and lower ethnic polarization (as measured by linguistic groups) are associated with higher rates of growth. This supports the hypothesis that there are weaker incentives to invest in human capital if there is ethnic and class polarization.

Richard Easterlin (USC) examines leadership by the United States in economic and political arenas. US leadership in exporting consumption patterns has transformed country after country as they attempt to acquire the American "middle class lifestyle." Easterlin argues that we have been less successful at exporting political democracy. Whether measured by legislative effectiveness or democracy in the executive branch, there has been virtually no change throughout the world.
(with the possible exception of Latin America). The growth phenomenon in Asia has not spurred the spread of democracy. Easterlin contends that multinational companies were very effective at using marketing and media innovations to influence individual preference structures to accept the US middle class lifestyle. However, political democracy has not been embraced as widely, leading to the conclusion that economic growth and the spread of capitalism may not automatically lead to democracy.

"Property Rights, Political Rights and the Development of Poor Countries in the Post-Colonial Period," by David Dollar and Aart Kraay (both World Bank) seems to confirm Easterlin's pessimistic conclusion. The authors examine the relationship between governance and development. Two aspects of governance are examined: well-defined property rights (Good Rule of Law) and broad-based political rights (Good Voice). For the poorest 60 countries, there is poor correlation between Rule of Law and Voice. Good Rule of Law is correlated with positive rates of economic growth, and the top performers have Good Rule of Law and Poor Voice. There is no consistent relationship between Good Voice and economic performance. Dollar and Kraay maintain that if poverty reduction is one of the goals of foreign aid, then the current practice of favoring democracies (Good Voice) may not be the most effective way to eliminate poverty in poor countries. They suggest thinking of fostering democracy and accelerating economic development as distinct policy goals when distributing foreign aid.

(At press time no information was available as to whether the bribe was ever paid.) Philip Hoffman and Jean-Laurent Rosenthal (UCLA) were the first in under the wire with their presentation of "Wars and the Evolution of Fiscal Regimes in Europe 1700-2000." They claim that the consequences of losing a war increased over this time period, so the opportunity cost to the ruling party of giving up some fiscal control decreased. They use this as the explanation of the centralization of fiscal regimes, as opposed to the traditional story that it was an increase in demand by the citizenry for social services.

Jari Eloranta (European University Institute) presented "Filling the Void? Implications of the Level of American Military Leadership on the Military Spending of European Democracies, 1920-1938." He concludes that military spending as a research topic defies simple explanation. His investigation focuses on the implications of the lack of American military leadership on European military spending during the interwar years. He tests Paul Kennedy's hegemon theory and finds it does not hold up in the case of the US and interwar Europe.

Finally, Michael Edelstein (Queen's College, CUNY) searches for economists who made important contributions to the American war effort in "The Size of the U.S. Armed Forces During World War II." He concentrates on the dispute between economists and the armed services over the productive capacity of the nation during the war years. One of the exciting conclusions of his work is that the war arguably produced the first economist-heroes in US history.

Friday concluded with the plenary session entitled, "Geography and Economic Development." Both Jared Diamond (UCLA), author of "Guns, Germs and Steel," and Jeffrey Sachs (Harvard) presented.
Diamond spoke on the role environmental factors play in economic development, including the role of domestication of plant and beast. Instead of emphasizing institutions, he examines such things as the tiny fraction of species that can be domesticated and their natural habitat. Even within continents, he finds geography was a dominant force.

Sachs questions whether "Guns, Germs and Steel" still applies? He emphasizes the ecological specificity of technology and its slower diffusion across the ecological divide. He also argues that poverty and underdevelopment are not randomly distributed, rather, that the disease climate plays a major role. He closed on the somewhat pessimistic note that the technology gap still exists and that it is profound and growing. In the lively discussion period, both speakers emphasized that institutions do matter but that we should not overlook the impact of the environment. Sachs particularly asserts that overlooking the disease environment and the under funding of public health will continue to doom many efforts to stimulate development in the tropics.

War was again the theme on Saturday morning as Lance Davis and Stanley Engerman (Rochester) teamed up to talk about their current research on the legal and economic aspects of naval blockades. The authors point out that the US has historically been a firm believer in neutrality and the right to free trade, except during those periods when they were involved in war. In their presentation, they focused on the effectiveness of the German blockade of the British Isles and the US eastern seaboard during WW II. In addition, they raised questions about the possibility of enforcing the "legal rules" of a blockade during a total war and about the role of individuals in structuring blockades and countermeasures.

"A Wolfram in Sheep's Clothing: Economic Warfare in Spain and Portugal, 1939-1944," by Hugh Rockoff (Rutgers) and Leonardo Cunama (CEU San Pablo University) followed. The authors focus on three distinct episodes: two separate oil embargoes and an attempt to preemptively purchase Spanish wolfram on the open market. The first oil embargo was successful, as was the preemptive purchase of wolfram to a degree. It forced the Germans to pay higher prices, but did not significantly curtail the supply of wolfram to Germany because of high monitoring costs.

The first of two sessions on the Great Depression, "The Great Depression-Macro" began with a paper by Pierre Siklos (Wilfrid Laurier University), "Understanding the Great Depression in the US versus Canada." This paper is part of a larger project comparing the experience of countries during the Great Depression. Following Eichengreen and Temin, Siklos seeks to examine the role of the Gold Standard on the Depression. Canada's financial structures and their response to the Depression were distinctly different than those of the US. The Canadians undertook far fewer reforms. Identification of the major "shocks" is difficult, and the mechanism by which the slump arrived in Canada is poorly understood. Siklos hypothesizes that the ideology of the Gold Standard may have led Canada to benefit less from institutional differences than might be reasonably expected.

Christina Romer (Berkeley) and Chang Tai-Hsieh returned us to the US for a discussion of the Federal Reserve and devaluation expectations in the 1932 Monetary Expansion. They question whether the Federal Reserve was able to undertake expansionary economic policy without
causing a speculative attack on the dollar. Romer and Tai-Hsieh use the one billion dollar expansionary open market operation in the spring of 1932 as a case study. Their econometric test shows little rise in net expected devaluation. More importantly, changes are not correlated with Fed moves. Qualitative information supports this negative result. Neither the Fed Open Market Policy Conference, the New York Fed minutes of the Board of Directors, nor the correspondence of the major players show any concern about a speculative attack. So, why did the Fed abandon what to us seems a sensible expansionary policy? Romer and Tai-Hsieh claim they relied on a misguided model of the economy – the Fed thought they had succeeded. Additionally, a power struggle among the Federal Reserve Bank branches killed the program.

The second session on the Depression, which focused on banking, opened with "The Speed of Bank Liquidation and the Propagation of the US Great Depression" by Joseph Mason (Drexel), Ali Anari, and James Kolan (both of Texas A&M University). They look at the role of the bankruptcy process and asset market overhang in the propagation of business cycles. The authors conclude that the stock of deposits in closed national banks was as important as the money stock in explaining changes in industrial output. This provides new evidence that the dynamic effects of credit disruptions were cumulative and pervasive during the Depression.

In their paper, "Internal versus External Convertibility and Developing Country Financial Crises: Lessons from the Argentine Bailouts of the 1930s," Alan Taylor (UC-Davis) and Geraldo Della Paolera (Universidad Torcuato di Tella) examine the experiences in the money and banking system that led to the creation of a central bank in 1935. In particular, they focus on the institutional arrangements created after WWI that set the money and banking system on a new, unstable path. The banking system featured fractional reserves and a gold standard rule with tension between internal and external convertibility. The role of an inside-outside money relationship is used to explain the crisis that led to the suspension of gold convertibility in December 1929.

In the session entitled, "Productivity," Gavin Wright presented the paper he and Paul David (both Stanford) authored. They examine early 20th century American productivity growth dynamics, focusing on the marked acceleration of total factor productivity growth following World War I. They attribute this to the confluence of the diffusion of electrification with a regime change in the industrial labor market.

The session continued with "Explaining Comparative Productivity Levels in Services: Technology and Organization in Britain, the United States, and Germany, 1870-1990" by Stephen Broadberry and Sayantan Ghosal (both University of Warwick). They argue
that, contrary to popular opinion, it is services, not industry, which drive trends in comparative productivity levels for the economy as a whole.

Saturday closed with the second plenary session of a decidedly local flavor, "Celluloid Capitalism - Entrepreneurs in Action." This roundtable discussion, moderated by actor John Lithgow, included Mary Corey (UCLA) and Ella Taylor, a film critic for the Los Angeles Weekly. The session opened with a 30-minute film created by independent filmmaker, Mike Sakamoto. The roundtable sought to explain why, in the greatest capitalist country in the world, capitalists and capitalism are portrayed as villainous and unseemly in the movies. A lively discussion from the capacity crowd ensued. Unfortunately, the conclusion seemed to be that economists touting the benefits of free markets just don't make for gripping plot lines.

Sunday morning commenced with a session entitled, "Technology and Business History," which was kicked off by Peter Temin (MIT), author of "The Evolving Structure of Coordination: Toward a Synthesis of American Business History." In this paper, Temin builds on the research that he, Naomi Lamoreaux, and Daniel Raff (Penn) have been conducting as part of their NBER project. They argue that exogenous forces, primarily improvements in transportation and communications, urbanization, and the general rise in per capita income, propelled changes in the economy's coordination mechanisms.

Zorina Khan (Bowdoin College) followed with "Copyrights, the Infringement of Intellectual Property, and American Economic Development." She began by calling Moby Dick a red herring but because of protestations from the audience, agreed with them that he was indeed a white herring. Khan contends that the failure of the US to honor international copyrights resulted in a lack of any great American novels in the 19th century.

Steven Usselman (Georgia Tech) closed the session with his presentation of "Government and the American Computer Industry: Public Policies, Private Platforms." He began by humbly noting that his paper was an elaboration of footnote 27 of the Temin, Lamoreaux and Raff paper. Usselman explains the importance of antitrust law in the evolution of the computer industry.

The final session of the conference was entitled, "Industry Studies and Structures." Emily Mechner (Bates College) in "The Closing of the Frontier in Barbados: Economies of Scale and the Distributional Impact of the Sugar Revolution," links data sets from 17th-century export registration records, census of property holdings, and the record of deeds to investigate the transition to a plantation economy from 1640-1680. By creating career histories for several thousand people, she finds surprising variation in the size of estates and widespread joint ownership. Despite the sugar "revolution," fragmented land holdings persisted, shedding new light on the role of small planters and artisans in land-clearing and capital formation.

In a timely piece, "Settling Auto Disputes in Court: Efforts to Define Relationships Among Car Buyers, Dealers and Manufacturers, 1905-1916," Sally Clarke (Texas) examines suits brought by buyers against sellers of autos. Manufacturers attempted to limit their obligations through the courts by declaring that dealers were independent vendors, not auto company agents. While the courts granted dealers some ability to engage in "seller's talk" (translation: little lies), the courts did find that the manufacturer of a complex product was responsible for defects.
that could reasonably be discovered with basic research. Interestingly, one of the first cases involved defective wheels, which the auto manufacturer tried to claim was not their responsibility but the fault of the wheel maker.

For all of the successful combinations that emerged from the trust movement of the late 19th century, the majority ultimately failed. Most studies focus on the successful few, and little is known about the rest. Karen Clay (Carnegie Mellon) and Werner Troesken (University of Pittsburgh) seek to rectify that situation in their work, "The Puzzling Demise of the Whiskey Trust." As Troesken explained, while the Whiskey Trust used strategic behavior such as limit pricing, exclusive dealing, and violence, they were ultimately unsuccessful in controlling the price and distribution of whiskey. The reason for their failure was market structure—illicit entry was just too easy. Antitrust legislation and the 1893 depression played only secondary roles.

The EHA meetings featured a bit of everything that LA promises: movie stars, beautiful weather, and glitzy parties. The Museum of Contemporary Art, located next to the conference hotel, was the site of the Friday evening cocktail party. On Saturday night, Cambridge University Press hosted a cocktail party under the stars on the hotel foyer. Following the party, the banquet played host to the awards ceremonies. While no statuettes of little gold men were passed out, several substantial awards were bestowed upon the assembled glitterati. The Alexander Gerschenkron Prize for the best dissertation in non-North American economic history was awarded to Aurora Gomez-Galvarriato Freer (CIDES), who wrote "The Impact of Revolution: Business and Labor in the Mexican Textile Industry, Orizaba, Veracruz 1900-1930" under the supervision of John Womack (Harvard). The Allen Nevins Prize, given for the best North American dissertation, went to William White (Research Triangle Institute) for "An Unsung Hero: The Farm Tractor's Contribution to Twentieth Century United States Economic Growth." White wrote under the supervision of Richard Steckel (Ohio State). Jeff Williamson (Harvard) won the Jonathan Hughes Prize for excellence in teaching. The Arthur Cole Prize for best article published in the JEH since September 1999 went to Gerardo della Paolera and Alan Taylor (UC-Davis). Dora Costa (MIT) won the Alice Hanson Jones Prize for the best book on North American economic history published in the 1998-99 biennium.

The Economic History Association will reconvene in Philadelphia next September. Fittingly, the gathering site will be the Loews (as in Marcus Loew, founder of MGM Studios) Hotel, providing the perfect segue from Hollywood to next year's theme—Finance and Economic Modernization.

Early empirical evidence in support of Rostow's theory of economic growth.
Carlo Cipolla, 1922-2000

Professor Emeritus Carlo Cipolla, a faculty member of the College of Letters & Science's Economics Department at UC-Berkeley and a prolific author on economic history, died September 5th in Pavia, Italy, after a long battle with Parkinson's disease. He was 78.

Cipolla began teaching at Berkeley in 1959 and also taught at Italian universities. "Cipolla was a leading economic historian of his generation," said Vice Provost Jan de Vries, the Sidney Hellman Ehrman Professor of History and Economics at Berkeley and Cipolla's colleague for many years. "Trained in Europe after World War II, he was very much a scholar of the 'old school'..." said de Vries. "...Carlo's scholarly output was enormous in volume, and much of it was pathbreaking."

For more than 30 years, Cipolla and his wife commuted between Berkeley and Pavia, Italy, where he was born. Cipolla retired in 1991 from Berkeley.

He inspired many students to explore the subjects of economics and monetary history, as well as the history of medicine and public health. The author of more than 20 books on medieval and early modern Italian economic and social history, he also wrote a humorous treatise, "The Basic Laws of Stupidity," which was a national bestseller in Italy and was produced as a play in France.

He was a humanist as well as an historian and extremely good researcher," said Charles Muscatine, professor emeritus of English and one of Cipolla's longtime friends. "He was an absolutely charming, generous, humorous, interesting person and a marvelous guide to the sites and sounds of Italy."

Cipolla was a member of numerous learned societies and was awarded the Premio della Presidente della Repubblica in Italy, in addition to honorary degrees in Italy and Zurich, Switzerland.

Cipolla is survived by his wife of 30 years, Ora Cipolla, of Rossmoor, California, and Pavia, Italy; his stepdaughters, Tanya Gregory of Florence, Italy, and Alexa Gregory of Lafayette, California; two grandchildren; and a brother, Manlio, of Milan, Italy.
Note: The following excerpt is from the introductory chapter of Latin America in Transition: Culture as Ecology, Power, and Diversity, an undergraduate interdisciplinary textbook (Forthcoming, University Press of America, 2001).

The world we live in is becoming increasingly more interconnected, a process that is called globalization. Globalization is not new but has been around in many very distinct forms since at least the 16th century. Contemporary globalization, unlike earlier forms, does not depend on colonialism or imperialism but on increasingly more rapid exchanges of information and wealth on a global scale. In its present form, globalization demands an increased and general understanding of world regions, not unlike the period directly after World War II. However, studies in history, anthropology, sociology, geography, economics, and politics have become highly specialized. The warp and woof holding the study of world regions has become unraveled. This is because many older grand theories of history or cultural evolution have not stood the test of time. A half century ago, anthropology was one of the intellectual approaches that held regional studies together. Julian Steward, a proponent of one highly integrative approach called cultural ecology, argued for an anthropological synthesis that was the basis for area studies courses and knit together history, geography, and the other social sciences. He also showed how history could be written grounded in ecology, politics, and economics. Steward introduced us to a new anthropology, one that was very attractive to young university students in the period directly after World War II, an anthropology that had a very global philosophy.

Latin America was one of Steward’s favorite regions of research. It is in Latin America where the most powerful syntheses were worked out for civilization, both ancient and modern. These syntheses were not only in anthropology, but also in the works of a variety of disciplines including history, political science, and geography. However, over the last fifty years and following the intense demands of the academic market place, scholars have lost contact with each other and have lost the goal of interdisciplinary research and writing. While political scientists concern themselves with histories of elites and elections, sociologists focus on the poor, economists on markets, and anthropologists have appointed themselves the representatives of indigenous peoples. Each highly committed specialist is going off in different directions, and there is a lack of synthesis.

This book offers one such synthesis and relies heavily on a point of view developed a half century ago by anthropologists. The strength of research by anthropologists in Latin America directly after the war was the interdisciplinary approach used by Steward and many of his colleagues in the study of culture change. At that point in time, after World War II, anthropologists found the challenge lay in understanding the relationship between global forces, local elites, and the peoples of the periphery. Transnational corporate executives, Latin American elites, and slum dwellers, as well as the peoples of the rainforest, were all the
subject of research and theory.

This book is a synthesis that I call global studies. Lest this label sound too grand, it is not very different from older political economy approaches but differs in the treatment it gives to power, trade, markets, and property rights. My approach loosely combines Stewardian cultural ecology (avoiding environmental determinism) with Douglas North’s paradigm for economic history.

The first chapter supplies a theoretic overview as well as a short geography of Latin America, both of which will be necessary road maps to the rest of the book. Chapter Two supplies a needed overview of the archaeology of prehistoric Latin America, while Chapter Three explains the types of communities found in Latin America. Chapter Four is a history of colonial Latin America. Chapter Five is a synthesis of political and economic changes. Chapter Six is based on human ecology and attempts to discuss the relationships between Latin American economic institutions and environments. The remaining chapters are political and economic in nature and survey key changes to the institutions of various regions of Latin America. Each chapter, while presenting an overview of the region, focuses on one or more case studies of specific countries. In these countries, we examine various social movements that have occurred over the last fifty years in response to the ebb and flow of powerful economic forces.

My global studies approach, while recognizing the important contribution to Latin American studies made by social scientists, rests on the less Eurocentric approach originally pioneered by Julian Steward and his associates in the middle of the 20th century. The reason I find Steward’s approach attractive is his argument that regional studies must include history and the other social sciences, including the study of politics.

The current narrow division of labor between the social sciences and history was not true a half century ago. Directly after World War II, many universities began to stress language and area training programs, and Latin American studies were among the most popular of such programs. The War had taught academicians the importance of teaching students about the varying regions of the world. Institutes by various names provided facilities for language, geography, anthropology, political science, economics, and historical studies of world regions. The goal was to improve Americans’ understanding of foreign relations.

As mentioned, Steward stressed an interdisciplinary approach. In this approach he gave a great deal of attention to the importance of power, a topic further elaborated on by one of his students, Eric Wolf. In the following, I suggest combining Steward’s historical ecology, Eric Wolf’s notion of power, and Douglas North’s stress on the importance of institutions. These three broad orientations bring in most other disciplines including anthropology, history, ecology, geography, political science, sociology, and economics. I do not try to become explicit as to what sections pertain to which disciplines. Such an approach would impose an unduly rigid framework on my writing. I lay out the roots or kernels of the underlying theme of global studies and then expand on some of the themes developed here. To limit the large number of possible topics, I am going to present culture in three different manifestations: culture as ecology, culture as power, and culture as diversity.
Culture as Ecology

In looking at “culture as ecology,” I am basically stressing Steward’s cultural ecological approach, an approach that might better be called ecological history. To explain change, Steward theorized that culture is composed of two different important components: the cultural core and superstructure. The core is made up of technology and subsistence practices (sources of production, from Marx), while superstructure is the belief systems or religion of a society. He argued that all ecosystems were distinct, and while technologies might be similar at the same evolutionary level, the interaction of core and superstructure would differ around the world. One should not expect European history to explain Latin America’s developmental phases. The essence of Steward’s cultural ecology is the idea that a group’s subsistence practices were selected by the ecology of a region and that it was the interaction of core and environment which determined culture. This approach has been described as a form of ecological determinism, which I avoid by giving equal time and attention to the subject of “power.”

Culture as Power

In his 1982 Europeans and the Peoples Without History, Wolf argues that not only have cultural materialists and other anthropologists ignored history, but they have also ignored the importance of power. However, Wolf does not define power in his work. Here we can move to the work of political scientists and political sociologists. According to scholars in these fields, power is really several distinct cultural entities. One mode of power is egocentric and depends on the personality of the individual; some individuals have greater personal resources than others. Modern political science addresses this domain in political psychology. A second type of power is more group-oriented and depends on the ability of one individual or group to impose his/her or its will on someone else or on another group. This fits the standard definition of power in political science and political sociology.

This second type of sociological power draws our attention to interactions between people or groups of people, particularly to conflict, but it does not describe the theater or the framework in which power is exercised. The analysis of power usually stops here, either in the study of how one individual got and exercised power or how one group exercises power against another group. But as C. Wright Mills and others (including Karl Marx, Max Weber, and the anthropologist, Lloyd Warner) point out, power is conditioned by circumstances external to the individual and group.

The Importance of Trade and Property Rights

While social scientists in fields outside of economics tend to stress the organization of production as the facet of culture that explains the major features of political and economic organization (hence, power), economists, taking their cue from Adam Smith, argue that the important creative features of culture are markets, private property, and trade. For over a century, this dichotomy has separated economics and the rest of the social sciences. But one of the observations one makes at this point in history is how extraordinarily important markets, property rights, and trade really are as our world is in the process of being transformed.

In most recent years, the work of Douglas C. North is the most sophisticated exposition of
the property rights/trade argument. Unlike most social scientists, North does not explain the stages of growth through subsistence techniques or the sources of production, as did anthropological human ecologists. North has a very interesting argument: for him capitalism is defined as due to the development of property rights. North goes even further, since he argues that the technology of the industrial revolution was the consequence of the invention of a new type of private property: patents. It is the relationship between these rights and trade which is critical in North's thinking. Patents and private property rights reduced transaction costs, or the costs of doing business, in early capitalist societies and allowed them to dominate trade. Those societies which adopted private property rights and patents forged ahead of those that did not. This happened in Western Europe and, later, in the United States. It did not happen in Latin America, primarily because of the mercantilist nature of colonial institutions and because of the high transaction costs of Spanish and Portuguese colonialism, and later, state capitalism after the Depression of 1929. For those countries and cultures which did not adopt the new private property concept, governments became larger in order to produce economic development; but transaction costs went up, and trade became more expensive. Those societies that increased their reliance on governments became relatively poorer.

Douglas North calls his point of view the New Institutional Economics, or NIE. The New Institutional Economics is quite distinct from dependency and world system theories. These once popular theories focused on dependency and blamed capitalism for poverty in Latin America. But dependency and world system theories are being abandoned as explanations of political economy. In their place are new theories based on models like the NIE paradigm. Nonetheless, it is valuable for the reader to understand these now dated perspectives. In addition, it is theories like these that led to the creation of state capitalism in the mid-20th century.

**Culture as Diversity**

The topic of diversity, like the topic of power, was largely ignored in Latin America because of Eurocentric evolutionary typologies and theories of economic development. According to liberal social science theory, the evolution of the capitalist state leads to the abandonment of ethnicity as a means of social organization. While Europe and North America were not lacking in ethnic diversity, unlike Latin America, they were organized on the ideals of “equality,” free labor, the regulatory action of the market, and open competition. Using a Eurocentric model, the tendency during the age of classic anthropology was to study indigenous peoples as survivors of an ancient past that would one day fade away. They were living museum pieces from the past, and their ethnic separateness was only temporary.

But as anthropologists have become reacquainted with the topic of power, it has become extremely obvious that ethnic identities throughout Latin America are not only not fading into liberal state organizations (which did not exist in the first place), but in many places ethnic identity and organization are becoming more, not less important.

**Toward an Understanding of Globalization**

Anthropology and anthropologists have had a century-long love affair with Latin America
and are among the primary interpreters of the cultural history of the region. In the last half-century, other disciplines such as sociology, economics, political science, history, and geography have become equally important, reflecting the increased intensity and interaction between global economic changes and regional reactions to capitalism in its various manifestations. Recently, the unprecedented abandonment of state directed forms of economic development and greater reliance on democracy, open markets, private property rights, and trade throughout Latin America forces theoreticians to consider expanding their interpretive theories to incorporate new theories of development. Theories of economic development in anthropology, other social sciences, and history have tended to dismiss the benefits of capitalism in order to focus on its exploitative characteristics. Such theories have tended to look at economic systems primarily from the point of view of systems of production, ignoring trade, property, and markets. Also ignored has been the extremely important topic of power, almost as though politics did not exist in this, possibly the most political, region in the world. The approach of this book does not deny the dangers of capitalism, but attempts to examine the relationship between institutional decision-making at national levels as they pertain to trade, property, and markets, while at the same time grounding ecological adaptations on systems of production.

I argue that the form of capitalism that evolved in Latin America in the 19th and 20th centuries was quite unlike that which took place in Western Europe and the United States. I call it state capitalism and contrast it to American entrepreneurial capitalism. The argument I will sustain in the following chapters is fairly simple. I argue that before Spain and Portugal dominated the Americas, native economies were based on state organized markets and trade. Once Spain and Portugal took control of what became Latin America, they imposed state-controlled economies and monopolized trade to their favor. While 19th century policies opened Latin America to export oriented trade, the control of the economies by states continued. In the middle of the 20th century, in reaction to dependency models, the Latin American states abandoned trade oriented development models for import-substitution models. The reason for their choices was largely a dependence on Eurocentric economic models, which stressed sources of production, and which convinced leaders that it was export oriented trade which caused poverty.

Today globalization has taken on a completely new look - one in which markets, property rights, and the rule of law play active parts in the process of development and state control of development play a much smaller role. As globalization occurs in Latin America, so are there changes in culture as ecology, culture as power, and culture as diversity.

Harold Goodhue Vatter, 1911-2000
Dr. Vatter died on September 8 in his Portland, Oregon home. He was 89 years old and remained active in his field, teaching until a few weeks before his death. After receiving a Ph.D. in Economics at UC-Berkeley, where he was Head Teaching Fellow, he taught at Oregon State University and Carleton College. Vatter was also a Lilly Faculty Research Fellow at the University of Chicago. He came to Portland State in 1965, where he taught American Economic History and the History of Economic Thought. He was the author of numerous books and articles.
Climometrics Society and Economic History Society
Sessions at ASSA 2001

Friday, January 5, 10:15 am, Marriott: Bonaparte

Productivity and Labor Markets
in the First Industrial Nation
Chair: Robert Margo (Vanderbilt University)


Gregory Clark and Marianne Page (University of California at Davis), Is There Profit in Reforming the Poor? The English Poor Law 1830-1842

Myeong-Su Yun (Rutgers University), Earnings Inequality in Late Nineteenth Century America and Britain

Friday, January 5, 2:30 p.m., Marriott Balcony L

Historical Evolution of US Labor Markets
Chair: Gavin Wright (Stanford)

Jeremy Atack (Vanderbilt), Fred Bateman (Georgia), and Robert A. Margo (Vanderbilt), Rising Wage Dispersion in American Manufacturing, 1830 to 1860

Joseph P. Ferrie (Northwestern), The Poor and the Dead: Socioeconomic Status, Location and Mortality in the US, 1850-1860

Joshua L. Rosenbloom (Kansas) and William A. Sundstrom (Santa Clara), Long Run Patterns of Migration in the United States

Discussants: Gavin Wright (Stanford), Dora Costa (MIT)

Saturday, January 6, 8:00 am, Marriott: Bonaparte (Clio)

The Development of Financial Markets and Institutions
Chair: Lee Craig (North Carolina State University)

Farley Grubb (University of Delaware), Creating the U.S. Dollar Currency Union, 1760-1811: A Quest for Monetary Stability or a Grab for Sovereignty?

Gerardo della Paolera (Universidad Tocuato Di Tella and Hoover Institution) and Alan M. Taylor (University of California at Davis), Internal Versus External Convertibility and Developing-Country Financial Crises: Lessons from the Argentine Bank Bailout of the 1930s

Ken Snowden and Joshua James (University of North Carolina at Greensboro), Thrifts and the Depression in North Carolina, 1927-1940

Marc Weidenmier (Claremont McKenna College and Claremont Graduate University), Understanding the Costs of Sovereign Defaults: The Case of the Confederate States of America

Saturday, January 6, 2:30 pm, Marriott: Jackson

Historical Evolution of Growth and Markets
Chair: Melissa Thomasson (Miami University)

Howard Bodenham (Lafayette College), Why so Many Mercantile and so Few Artisan Partnerships?: The Nature of the Firm in Early America

George Delcis (University of Illinois), Rich Sicotte (University of Calgary), and Peter Tomczak (University of Michigan), Collision in Trans-Atlantic Passenger Shipping, 1899-1911

James Forman-Peek (H.M. Treasury) and Pedro Lains (ICS, Lisbon), Economic Growth in the European Periphery 1870-1914

Anthony P. O'Brien and Judith A. McDonald (Lehigh University), Retreat From Protection: R.B. Bennett and the Movement to Freer Trade in Canada, 1930-35

Saturday, January 6, 8:00-11:00 pm, Hotel Monteleone

Clio and Friends Cocktail Party
Host: Mike Haupert
Room to be announced at paper sessions

Sunday, January 7, 10:15 am, Marriott Balcony J

Institutional Bases for the Modern Economic World
Chair: Eugene N. White (Rutgers)

Cliff Bekar and Clyde Reed (Lewis and Clark), Toward Resolving the Debate Over Open Fields

Avner Greif (Stanford), On the History of the Institutional Foundations of Impersonal Exchange: From Communal to Individual Responsibility in Pre-Modern Europe

Philip T. Hoffman (Cal Tech), Gilles Postel-Vinay (INRA, LEA, and EHESS), and Jean-Laurent Rosenthal (UCLA), Intermediation and the Development of Financial Markets: Evidence from France 1807-1840

Discussants: Eugene N. White (Rutgers), Gary Richardson (UC-Riverside)
A Letter from the Editor

'Tis the season of anticipation, Christmas is nearly upon us, the end of the semester looms, and the possibility of an end to the Florida recount is tantalizing. Not to be lost among all that excitement are the Clio sessions at the ASSA meetings in New Orleans early next year. Immediately to your left (don't look now though, or you may not return to this missive), you will find a schedule of the Clio sessions, as well as the sessions offered by the Economic History Association (the EHA will offer two ASSA sessions for the first time).

As if the excitement of five economic history-related sessions is not enough, don't forget that the revelry will continue on Saturday night, January 6th, with the Clio Cocktail Party. I am thrilled to be able to host this year's party, which will be held in the Monteleone Hotel from 8-11pm. The precise location within the hotel will be revealed at each of the Clio sessions.

Continuing on the theme of anticipation, let me address two specific areas of need for the Newsletter. Several conferences loom on the horizon for the spring. I am always looking for reporters to provide summaries of the proceedings at these gatherings. One of the most valuable services of the Newsletter is to provide summaries of all of those interesting meetings that we cannot attend. If you are willing to write a summary (not as difficult as you may think — after all, I was able to accomplish the feat at this year's EHA meetings and still had time to get lost trying to find Edison Field in Anaheim), please drop me an e-mail, and I will send you your press credentials and a set of guidelines for reporters. The typical arrangement has two or three people reporting on each conference and then pooling their efforts into one report of approximately 2500 words. The glory of a byline is eclipsed only by the thrill of a nod from the Mullah — or so I've been told.

Book previews are also needed to keep our newest feature going. Ideally, the book preview will provide an overview of work that will be published in the next 12-18 months. The preview can be an introductory chapter or an overview of approximately 2500 words. It not only alerts readers to large-scale research, but is also a cheap form of advertisement (nearly free, if you simply send me your introductory chapter). In fact, in order to encourage this feature, I am running a one-time special: if you send me the introductory chapter to your forthcoming book, I will edit it for length, and then return the abridged version to you for your final approval before publishing. While that still doesn't make the cost to you zero, it comes pretty darn close. Besides, the publicity is certain to generate additional sales that will more than make up for your effort.

If you're stuck for some Christmas gift ideas this year, why not consider a Clio membership? It fits nicely both a stocking and a budget and is sure to be appreciated by the recipient. As an enticement, I'm offering a free pocket 19th-century exchange rate chart to the first 50 people who buy a gift subscription. If your intended recipient is already a member, how about a hand-lettered invitation to the Clio cocktail party, a framed copy of the front page of your favorite historical Clio newsletter, or an autographed photo of Lee Craig? Supplies of some of these items are limited, and all remaining stock will be sold on the Home Shopping Network at the end of the year.

As if this time of year isn't stressful enough, I found out recently that I am 92nd in line for the presidency if the recount is still not completed by inauguration day. If Adam Smith's birthday is declared a national holiday and a check off for donations to Clio appears on your tax return, you'll know I'm in the White House. Until then, I hope to see you in New Orleans.

Happy Holidays,

Michael J. Haupert, Editor
Call for Papers

2001 Economic History Association Meetings
Philadelphia, Pennsylvania
September 14-16, 2001

The 65th Annual Meeting of the Economic History Association will take as its theme, "Finance and Economic Modernization." We invite proposals for papers, which must include a 150-word abstract and a longer 3-5-page summary. A draft of the paper would be welcome. Proposals must include the full name, mailing address, telephone number, fax number, and e-mail address of all authors.

The committee also welcomes proposals for entire sessions. Session proposals must include abstracts and summaries of each paper. The committee reserves the right to accept some papers from a proposed session and reject others and to assign papers to different sessions. The deadline for submissions is Monday, January 29, 2001.

Proposals for papers should be submitted online at www.eh.net/EHA. (Those without Internet access should contact the program committee for an alternate method.)

Those who receive their Ph.D. between June 1, 2000 and May 31, 2001 are invited to apply for inclusion in the dissertation session. Six finalists, each of whom will receive an award of $250, will be chosen to present summaries of their dissertations. Planned attendance at the meetings is a requirement for submitting an application, and presentation of a summary is required for eligibility for a prize. The deadline for submissions is Thursday, May 31, 2001. Dissertations on US or Canadian history are eligible for the Allan Nevins Prize. Hard copies of such dissertations should be sent to:

Howard Bodenhorn
Department of Economics
Lafayette College, Easton, PA, 18042-1776
bodenhorn@lafayette.edu.

Dissertations on other areas are eligible for the Alexander Gerschenkron Prize. Hard copies of such dissertations should be sent to:

Alan Dye
Department of Economics
Barnard College
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Registration materials will be posted in May: http://www.eh.net/EHA and http://socs.berkeley.edu/~olney. For more information contact: Martha Olney, EHA Meetings Coordinator, http://socs.berkeley.edu/~olney, eha-mtgs@socs.berkeley.edu.
The Cliometric Society will sponsor three sessions and a cocktail party for Members and Friends at the 2001 annual meetings of the Allied Social Science Association in New Orleans, January 5-7; 2001. ASSA Coordinator Kyle Kauffman and Gavin Wright selected and grouped papers sure to keep you away from the French Quarter for at least six hours. Chairs, discussants, and paper presenters are assumed to have read each full paper slated for their sessions. Other attendees are encouraged to read the abstracts in this insert and the expanded summaries published on the EH.Net web site: [http://www.eh.net/Clio/](http://www.eh.net/Clio/). Complete papers are available from the authors on request; both the following abstracts and the summaries include contact information for the authors of correspondence. Sessions will be conducted in traditional Clio style: a brief presentation by the author and discussant, followed by discussion from the floor.

**Productivity and Labor Markets in the First Industrial Nation**

**Friday, January 5 10:15 am**  
**Marriott: Bonaparte**

Chair: Robert Margo (Vanderbilt University)


Gregory Clark and Marianne Page (University of California at Davis), *Is There Profit in Reforming the Poor? The English Poor Law 1830-1842?*

Myeong-Su Yun (Rutgers University), *Earnings Inequality in Late Nineteenth Century America and Britain*

**The Development of Financial Markets and Institutions**

**Saturday, January 6 8:00 am**  
**Marriott: Bonaparte**

Chair: Lee Craig (North Carolina State University)

Farley Grubb (University of Delaware), *Creating the U.S. Dollar Currency Union, 1760-1811: A Quest for Monetary Stability or a Grab for Sovereignty?*

Gerardo della Paolera (Universidad Torcuato Di Tella and Hoover Institution) and Alan M. Taylor (University of California at Davis), *Internal Versus External Convertibility and Developing-Country Financial Crises: Lessons from the Argentine Bank Bailout of the 1930s*

Ken Snowden and Joshua James (University of North Carolina at Greensboro), *Thrifty and the Depression in North Carolina, 1927-1940*

Marc Weidenmier (Claremont McKenna College and Claremont Graduate University), *Understanding the Costs of Sovereign Default: The Case of the Confederate States of America*

**Historical Evolution of Growth and Markets**

**Saturday, January 6 2:30 pm**  
**Marriott: Jackson**

Chair: Melissa Thomasson (Miami University)

Howard Bodenhorn (Lafayette College), *Why so Many Mercantile and So Few Artisan Partnerships?: The Nature of the Firm in Early America*

George Deltas (University of Illinois), Rich Sicotte (University of Calgary), and Peter Tomczak (University of Michigan), *Collusion in Trans-Atlantic Passenger Shipping, 1899-1911*

James Forman-Peck (H.M. Treasury) and Pedro Lains (ICS, Lisbon), *Economic Growth in the European Periphery 1870-1914*

Anthony P. O'Brien and Judith A. McDonald (Lehigh University), *Retreat From Protection: R.B. Bennet and the Movement to Freer Trade in Canada, 1930-35*

**Clio and Friends Cocktail Party**

**Saturday, January 6 8:00-11:00 pm**  
**Hotel Monteleone**

Host: Mike Haupert

Room to be announced at paper sessions
Productivity and Labor Markets in the First Industrial Nation

Liam Brunt (Nuffield College Oxford) 1

Abstract. In this paper we present new estimates of land and labour productivity in English and French arable farming over the period 1700 to 1850. We find that productivity was much higher in England than in France and the gap widened from 1705 to 1775. Land-labour ratios were somewhat higher in England, but the differential in labour productivity was caused primarily by higher output per acre in England. This was due overwhelmingly to higher grain yields, especially for wheat. The higher English wheat yields were caused by differences in crop rotation, higher capital investment and the English adoption of mechanical technology.

I. Introduction. It has been argued that the key to England's early industrialisation was high labour productivity in the agricultural sector. In an age when countries had to be more or less sufficient in food production, England's high agricultural productivity kept food prices relatively low whilst allowing labour to be released to the industrial sector. This transfer of labour resources has been identified as the definitive feature of England's industrial revolution. 2 England's substantial superiority in agricultural labour productivity has been widely noted and the causes sought. Comparisons are commonly made with France, which is England's closest neighbour and shares similar environmental conditions in many regions. 3 We continue that tradition in this paper.

The data on inputs and outputs are very imperfect (particularly for France) and the extent, timing and nature of productivity growth is therefore controversial. A simple approach to estimating labour productivity is what we might call the 'agricultural work force method' promoted by Wrigley. He compares the proportion of the population employed in agriculture in various countries - noting that a smaller proportion of agricultural labourers in the work force must imply higher labour productivity in agriculture ceteris paribus. 4

(Suppose that one agricultural worker in England produces enough food to feed himself and two industrial workers. Then he must be producing more food than a French farm worker who produces enough to feed only himself and one industrial worker). This reasoning is sound - but the ceteris paribus assumption can obscure a multitude of important differences. For example, suppose that England and France had the same proportion of the workforce in agriculture but food prices were higher in France - and consumption per head consequently lower. This would imply that output per agricultural worker was lower in France. (Although each agricultural worker in England and France was supporting the same number of industrial workers, the workers in France were consuming less). Another example is the foreign trade in foodstuffs. Wrigley and Allen (who has used this technique extensively) have basically ignored the international trade in grain, on the basis that it was relatively small until 1850. 5 But England went from exporting ten per cent of her grain production in 1700 to importing ten per cent of her grain consumption in 1800. So ignoring the traded sector would lead to a substantial error in our comparisons of English and French productivity changes over the eighteenth century.

Even if the broad outlines of output growth can be accurately derived from Wrigley's method then we would still be ignorant regarding many of the most important questions about productivity growth. For example, we would like to know how capital and land inputs varied over time; which technologies were coming in general use, what was their effect on output, and how they affected output. Only then can we really address comparative issues, such as why different countries employed different technologies and what the effect might have been on their outputs. In order to achieve the detail required to answer these questions, we need to work up estimates of output and productivity from production data. That is the task undertaken here.

In the next section we compare English and French labour productivity using both standard economic tools (Fisher price and output indices) and more specialised production models for eighteenth century agriculture. Section III concludes.

II. Comparing English and French Labour Productivity. We begin by quantifying output per worker in England and France between 1705 and 1845. In 1705, output per worker (Q/L) in England was already double the French level. This can be seen in Table 1 below (compare columns 2 and 5). The gap widened considerably between 1705 and 1775, when output per worker almost doubled in England whilst declining slightly in France. Thereafter, labour productivity was fairly static in both countries.

Table 1. Comparison of English and French Arable Labour Productivity.

<table>
<thead>
<tr>
<th>Year</th>
<th>English (Q/L)</th>
<th>English (Q/A)</th>
<th>English (A/L)</th>
<th>French (Q/L)</th>
<th>French (Q/A)</th>
<th>French (A/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1705</td>
<td>20722</td>
<td>573</td>
<td>18.70</td>
<td>5129</td>
<td>382</td>
<td>13.43</td>
</tr>
<tr>
<td>1775</td>
<td>19679</td>
<td>975</td>
<td>20.17</td>
<td>4523</td>
<td>398</td>
<td>11.36</td>
</tr>
<tr>
<td>1845</td>
<td>21416</td>
<td>1543</td>
<td>13.88</td>
<td>4000</td>
<td>504</td>
<td>7.93</td>
</tr>
</tbody>
</table>

1 This is part of a longer paper of the same title. The longer paper contains all the appendices and data referred to in the text and is available from the author on request. This research was funded by the Economic and Social Research Council, the Fulbright Commission and Nuffield College, Oxford, under their Prize Research Fellowship programme. I would like to thank Lucy White for helpful comments. Any remaining errors are my own responsibility. The author can be contacted at Nuffield College, Oxford OX1 1NF and liam.brunt@nuffield.ox.ac.uk.
2 Crafts, Growth, 6-7.
3 O'Brien and Keyder, Economic Growth, 11.
4 Wrigley, People, 157-8, 180-9.
5 Allen, 'Agricultural Output and Productivity.'
Output per worker in each country is a function of both the local acres per worker \((A/L)\) and the local output per acre \((Q/A)\). Hence the England-France differential in output per worker is a function of the differentials in both of those variables. That is:

\[
(Q^E/L^E) - (Q^F/L^F) = (Q^E/A^E) - (Q^F/A^F) + (A^E/L^E) - (A^F/L^F)
\]  

(1)

where the superscripts \(E\) and \(F\) denote England and France respectively. It would be historically interesting to see the extent to which the England-France labour productivity differential was driven by: a) the differential in output per acre; and b) the differential in acres per worker. O'Brien and Keyder argue that:

'...too many commentators on French retardation assume that Britain's superiority in labour productivity emanated from higher yields in animal and arable husbandry. That was not the case.'

Table 1 above shows that the English workers had both more acres per worker and higher output per acre. The gap in acres per worker increased and then declined slightly over time (columns 4 and 7). But the really important differences and changes are to be found in output per acre (columns 5 and 6). The value of English output per acre was always very high in 1705 and rose by 70 per cent between 1705 and 1775, whilst French output per acre was static. Thereafter, the value of output per acre continued to rise strongly in England (58 per cent higher by 1845) whilst the French increase was quite modest.

In fact, a straightforward decomposition will show that, in arable agriculture at least, the commentaries are correct and O'Brien and Keyder are wrong. Taking natural logarithms is simple way to decompose the England-France labour productivity differential into the difference in output per acre and the difference in acres per worker:

\[
\ln(Q^E/L^E) - \ln(Q^F/L^F) = [\ln(Q^E/A^E) - \ln(Q^F/A^F)] + [\ln(A^E/L^E) - \ln(A^F/L^F)]
\]  

(2)

Equation (2) states that the difference in the logarithms of output per worker is equal to the difference in the logarithms of output per acre plus the difference in the logarithms of acres per worker. This makes it very easy to gauge the relative importance of output per acre and acres per worker. The results of this decomposition are reported in Table 2 below (where column 2 equals the sum of columns 3 and 4).

<table>
<thead>
<tr>
<th>Year</th>
<th>English Superiority in Output per Worker</th>
<th>English Superiority in Output per Acre</th>
<th>English Superiority in Acres per Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1705</td>
<td>0.74</td>
<td>0.41</td>
<td>0.33</td>
</tr>
<tr>
<td>1775</td>
<td>1.47</td>
<td>0.90</td>
<td>0.57</td>
</tr>
<tr>
<td>1845</td>
<td>1.68</td>
<td>1.12</td>
<td>0.56</td>
</tr>
</tbody>
</table>

The differential in output per acre was clearly driving England's productivity advantage throughout the period 1705 to 1845. Moreover, England's jump ahead between 1705 and 1775 was generated by a substantial increase in the differential in output per acre.

How can we explain these marked changes? We are using a Fisher Ideal Index to make a comparison of the value of output per acre \((Q/A)\) in the two countries. Recall that the Fisher value index decomposes multiplicity into a Fisher quantity index (which measures the difference in physical output per acre) and a Fisher price index (which measures the difference in the price of output). That is:

\[
V^p = Q^p/V^q
\]  

(3)

In Table 3 below we report the Fisher value index for France (where England is 1 in each year). We then decompose the value index multiplicatively into the Fisher quantity index and the Fisher price index (where England is again 1 for each index in each year). Hence in Table 3 below, column 2 is equal to column 3 multiplied by column 4.

### Table 3. Decomposing the English-French Arable Land Productivity Differential.

<table>
<thead>
<tr>
<th>Year</th>
<th>French Value Index (England=1)</th>
<th>French Quantity Index (England=1)</th>
<th>French Price Index (England=1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1705</td>
<td>0.67</td>
<td>0.61</td>
<td>1.10</td>
</tr>
<tr>
<td>1775</td>
<td>0.41</td>
<td>0.41</td>
<td>1.00</td>
</tr>
<tr>
<td>1845</td>
<td>0.33</td>
<td>0.43</td>
<td>0.76</td>
</tr>
</tbody>
</table>

First, let us consider relative prices in England and France. In 1705 French prices were higher than English prices (the French price index stood at 1.1 compared to 1 in England). This result is consistent with trade flows in the early eighteenth century, when England was a net exporter of grain for the only time in the modern age. Many of those exports flowed to France in response to the price differential which our data have revealed. Hence in 1705 the value of French output per acre (per worker) was being maintained by relatively high domestic prices. After 1705 agricultural prices rose in England relative to those in France, leading to equalisation of prices by 1775. This resulted from rising population pressure pushing up English agricultural prices. Again, this is consistent with the change in trade flows. The English trade balance in wheat was approximately neutral in the 1770s and England sometimes imported wheat from France (although France was only occasionally the cheapest source of foreign grain). Between 1775 and 1845 relative prices rose even further in England, so that the French price index stood at only three quarters of the English level by 1845. Wheat imports into England were very restricted under the corn laws whilst the population was increasing dramatically. Hence English domestic prices were very high by international standards, including those of France. The value of English output per acre was therefore very high in 1845.

Now let us turn to physical output per acre in England and France. We can see from Table 3 above that in 1705 French physical output per acre was only 0.61 of the English level. Between 1705 and 1775 France fell even further behind England, with the French index falling to 0.41 in 1775 and remaining stationary thereafter.

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7 Mitchell, *British Historical*.
We can isolate the sources of England’s advantage in output per acre more specifically. In Table 4 below we have postulated various counterfactual scenarios in order to gauge their effect on the French output index. For example, suppose that France had adopted the new fallow crops (turnips and clover) as rapidly as England (column 3). Or suppose that wheat yields had been the same in the two countries (column 4). Or finally, suppose that all the crop yields had been the same in the two countries (column 5).

Table 4. Explaining the English-French Differential in Physical Output per Acre.

<table>
<thead>
<tr>
<th>Year</th>
<th>French Quantity Index England=1</th>
<th>Effect on the Index of French Adopting Clover and Turnips to the Same Extent as England</th>
<th>Effect on the Index of French Attaining Wheat Yields as High as those in England</th>
<th>Effect on the Index of French Attaining Other Crop Yields as High as those in England</th>
<th>Effect on the Index of French Attaining Other Crop Yields as High as those in England</th>
</tr>
</thead>
<tbody>
<tr>
<td>1705</td>
<td>0.61</td>
<td>+0.00</td>
<td>+0.05</td>
<td>+0.37</td>
<td></td>
</tr>
<tr>
<td>1775</td>
<td>0.41</td>
<td>+0.09</td>
<td>+0.06</td>
<td>+0.40</td>
<td></td>
</tr>
<tr>
<td>1845</td>
<td>0.43</td>
<td>+0.12</td>
<td>+0.18</td>
<td>+0.25</td>
<td></td>
</tr>
</tbody>
</table>

England’s initial advantage in 1705 clearly stemmed from her crop yields, which were exceptionally high by international standards (with the possible exception of the Netherlands). Hence if the French had managed to attain such high yields then their physical output index would have rise from 0.61 to 1.03 (= columns 2 + 4 + 5). England stretched her advantage up to 1775 with the adoption of turnips and clover, which replaced bare fallow and made more intensive use of land resources (column 3). Between 1775 and 1845 the adoption of turnips and clover went on apace in England. But France adopted clover at a similar rate (it comprised 11 per cent of French arable area by 1850) so there was little effect on the difference between the two countries. The French also introduced turnips and similar root crops (notably sugar beet) on a small scale. The continuing importance of high crop yields in England (particularly wheat yields) is apparent from columns 4 and 5 in Table 4.

We have now shown that the major cause of the labour productivity differential between England and France was the lower French output per acre, especially physical output per acre. We have also shown that the major cause of the underlying differential in physical output per acre was the lower French crop yields. The differential in wheat yields was an important component of this differential in output per acre because it was the highest value crop and the yield differential grew substantially over time. It widened from 5.6 bushels per acre in 1705 to 10.7 bushels in 1775; and it widened even further to 11.7 bushels up to 1845.

How can we explain the gap in English and French wheat yields? We can use the wheat model which we have estimated elsewhere to get a grip on this issue, although the results are very preliminary.9 Our model explains wheat yields as a function of a large number of environmental and technological inputs. Using the coefficients from the model, we can estimate how yields would have been different if farmers had used more or less of each input. The most important variables are crop rotation, the presence of land drainage, the use of seed drills, and whether the land was limed or marled. We gathered as much data as possible on all the inputs for both countries in the three benchmark years which we have been examining.10 Then in Table 5 below we estimate the advantage which England gained from each input - given the quantities of each input used in England and France, and the sensitivity of output to each input.


<table>
<thead>
<tr>
<th>Year</th>
<th>English Yield Advantage</th>
<th>English Rotation Advantage</th>
<th>English Seed Drill Advantage</th>
<th>English Lime, Marl Advantage</th>
<th>English Drainage Advantage</th>
<th>Percent of Advantage Explained</th>
</tr>
</thead>
<tbody>
<tr>
<td>1705</td>
<td>5.6</td>
<td>2.10</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>38</td>
</tr>
<tr>
<td>1775</td>
<td>10.74</td>
<td>5.66</td>
<td>0.59</td>
<td>2.34</td>
<td>0.64</td>
<td>86</td>
</tr>
<tr>
<td>1845</td>
<td>11.66</td>
<td>4.00</td>
<td>2.05</td>
<td>2.34</td>
<td>0.71</td>
<td>78</td>
</tr>
</tbody>
</table>

The impact of crop rotation on wheat yields comes through strongly in our analysis, which is what we would expect in an organic farming system with relatively low levels of fertilizer inputs (column 3). We saw above how turnips replaced fallow in the rotation and thereby raised output per acre directly; here we see the indirect effect of turnips through their upward pressure on wheat yields in the rotation of crops. The adoption of turnips explains much of the increase in the England-France yield differential between 1705 and 1775, as the rotation effect rises from 2.1 to 5.7. We can also see the importance of new mechanical technology (seed drills) and high levels of capital investment in old technology (liming and marling). At the moment we cannot explain all of the differential between England and France (column 7). Some of the residual may be due to factors which we have not yet been able to incorporate into the model, such as seed variety. This is an area of ongoing research.

III. Conclusion. We have presented new evidence that land and labour productivity was much higher in England than in France. The gap in labour productivity was due primarily to higher output per acre, rather than more acres per worker. This differential widened substantially in the early eighteenth century as turnips and clover were taken up in English agriculture and wheat yields improved. Throughout the period, the productivity differential between England and France was driven primarily by the difference in crop yields between the two countries. A detailed model of wheat yields reveals that the yield differential is largely explained by the differences in crop rotation, low levels of capital investment and the absence of seed drills in France. Hopefully in the future we will be able to explain the

9 Brunt, ‘Nature or Nurture?’

10 We know the crop rotation in each country from contemporary sources. We know the numbers of seed drills used in England, and we assume that seed drills had not reached France in any significant numbers by 1845. We can estimate the quantities of lime, marl and drainage used in England at each benchmark date, and we have simply assumed that no lime, marl or drainage was used in France. Given that capital investment in French agriculture is generally thought to have been very low, this is likely to be a reasonable first approximation. There is no systematic survey of land quality in France, so we were unable to take that factor into account in our analysis. However, it should be noted that the effects of land quality are quite modest and this is unlikely to explain much of the difference between the two countries.
differential more fully by gathering data on the other important inputs in wheat production.

* Is There Profit in Reforming the Poor? The English Poor Law 1830-1842

Gregory Clark and Marianne Page
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Introduction. We estimate the social costs of the welfare system that operated in England prior to 1834, the Old Poor Law. This system gave a legal entitlement to a subsistence income. The Poor Law Commission of 1832-3 famously concluded that the Old Poor Law created great economic losses by reducing the work incentives and limiting labor mobility. It concluded, in Blaug's words, that "the more the Old Poor Law relieved poverty, the more it encouraged the poverty which it relieved."

The Report prompted a radical reform of the welfare system in 1834. The right to subsistence was retained, but subsistence was to be delivered in a less attractive form to the able bodied – in a workhouse under close supervision. The reforms led to reduced welfare payments per head of the population after 1834. We measure whether these cuts produced the efficiency gains predicted by comparing rents in rural parishes before and after the reform compared to the change in the local welfare tax burden. We also test whether the reforms speeded migration from low wage rural parishes to high wage urban parishes. Our very preliminary results suggest that most likely the Old Poor Law served mainly as a transfer of income from land owners to the poor with little efficiency costs in the form of reduced labor inputs, labor effort, or labor mobility.

These results suggest two things. The first is that historical experience suggests that it was possible for many years to run a welfare system that guaranteed subsistence, and that more than 10% of the population in rural areas participated in, without creating great social costs. We explore what overlooked features of the old system kept social costs down. Secondly they strengthen the conclusion emerging from the study of other British institutions in this era that in England, the country to first experience modern economic growth, institutional innovation played a small role in the enhanced growth of the economy. England had relatively efficient social institutions long before the Industrial Revolution.

The Reform of 1834. Under the Old Poor Law parishes and townships in England supported their poor through taxes on property. The generosity of relief was controlled by magistrates who supervised groups of parishes. Workers received support when they were aged, ill, or unable to find work, but also when their family earnings fell below the adjudged subsistence level. By the early nineteenth century large numbers of workers were receiving some wage subsidy based on family needs. Thus in 81 out of 261 rural parishes surveyed in 1832-3 the subsistence level for a family with three young children was greater than the farm wage. In Stradbroke in Suffolk, for example, a man with a family of 3 children was entitled to 12.25 s. per week, while the weekly farm wage was 8 s. Married workers in many parishes seemingly faced a 100% marginal tax rate. The gains from extra effort at work were small, as were the costs of being fired for not performing well.

Official statistics imply that in 1813-15 9% of people received some poor relief. But in the rural areas of the south the proportions were even higher: 13% in 1813-15. Relief payments were much higher in the rural areas because wages were lower there.

The Old Poor Law was alleged to have three economic costs.

First, many workers had little incentive to exert themselves at work since they were going to end up with the subsistence level of income whether they were employed or not. Thus, it was alleged the system drove up effective labor costs. Workers became slothful, truculent and uncooperative since their jobs had no value to them.

Second, since workers were guaranteed a subsistence income in their place of birth they had reduced incentives to bear the costs and hazards of moving in response to wage differentials. Thus the system was alleged to create a misallocation of labor in the economy – too many workers in the low wage rural parishes, and too few in the high wage urban areas.

Thirdly the system should have reduced investment in land improvement. The tax to support the poor was levied on property rental values at a rate as high as 40%. In parishes with high poor expenses the required return on investments in land improvement would be correspondingly greater. Thus the Old Poor Law reduced labor demand by discouraging investment.

Poor Law Amendment Act of 1834 sought to radically reform poor relief. The safety net, the legal right to relief, was maintained. But now all able-bodied applicants for relief were to enter a workhouse where the conditions were planned to be wholesome but unpleasant. Though the 1834 reform was supposed to end all outdoor relief, there has been debate about how strictly it was applied. To check that the reforms did lead to cuts, and to examine the pattern of cuts, we have assembled for a sample of 1,873 parishes and townships data on poor payments per person in the population in the five years 1829-33, just before the reform, and in the four years 1838-41 just after the reform. This data is summarized in figure 1 by the average level of payments per head in 1831-3. We looked at what happens to payments per person in 1838-41 and 1829-30 as a function of how much was being paid per head in the base year.

Before the reform the payment pattern across parishes is stable over time between 1829-30 and 1831-3. After the reform the payment pattern is stable for parishes with payments per head of population of less than £0.60. But in the higher paying parishes there is a clear pattern of cuts. The higher the payment the greater the proportionate cut. Thus the reforms were imposing real cuts, and they were imposing them in the areas of the higher relief payments per head. Our interpretation is that in areas of low payments the relief payments before 1834 were principally to the elderly and orphans, and were not affected by the strictures of the New Poor Law. The areas of high payments per capita were those where the payments were subsidies to wages, and thus were cut.
We can explain 58% of the variance in the change in poor payments per head by parish or township between 1831-3 and 1838-41 ($\Delta PPN$) with the simple regression

$$\Delta PPN = \alpha + \beta_1 PPN_{1831-33} + \beta_2 DHIGH(PPN_{1831-33} - 0.6) + \epsilon$$

where $PPN_{1831-33}$ is the poor relief payments per resident in 1831-33, and $DHIGH$ is an indicator variable which is 1 when $PPN_{1831-33} > 0.6$. In contrast if we look at the changes between 1829-30 and 1831-33, then the same specification explains just 8% of the variance. Thus the regime change alone explains at least half of the changes in poor payments per head between 1831-3 and 1838-41.

In the tests of the effects of the poor relief reform below we will be using as a dependent variable poor payments per acre in rural parishes, defined as those with the majority of workers employed in agriculture. Changes in poor payments per acre in rural parishes are even more predictable than changes in poor payments per head. If we translate the equation above into poor payments per acre we can explain 70% of the variance in changes in poor payments per acre between 1831-3 and 1838-41.

In recent years there has been dissent from the Poor Law Commission's analysis that the Old Poor Law caused significant social costs. The earlier one led by Mark Blaug argued that poor relief payments under the Old Poor Law were too small to induce change workers' incentives. The relief payments mainly supported the elderly, and the infirm with little effect on work effort, migration, employment participation or fertility for workers.

**Figure 1: The effects of the New Poor Law by the earlier level of payments per head**

![Graph showing the effects of the New Poor Law by the earlier level of payments per head](image)

George Boyer has argued further that the Old Poor Law did not even transfer income from property owners to the poor. It persisted because rural landlords were gaining from the payments. Boyer pointed out the surprising geographic variation in relief payments under the Old Poor Law. Payments per head of population were greater in rural parishes than in urban, and they were greater in the grain growing South East than in the equally poor but pastoral South West. The reason for this, argues Boyer, was that labor-hiring farmers used poor relief to supplement wages. Such farmers operated within a competitive labor market, and needed to pay enough to retain adequate labor in the countryside. By laying off workers when labor demand was low in winter, and having them supported by the parish, they reduced net labor costs since the occupants of the houses and the tithe owners paid some of the poor relief. This device is only profitable if there is a period where the marginal product of farm workers is very low. This explains more extensive poor relief payments in the grain areas where labor demand was much more peaked in the summer.

Since poor relief payments were being used largely to substitute for wages they would also have no effect on labor migration between country and town.

Boyer's primary empirical support for his theory is data from the Poor Law Commission on a cross section of parishes in 1832-3. He shows that parishes with higher poor law payments were those with more seasonal labor demands, and also those with a larger proportion of ratepayers who were farmers. However, as is shown below in Table 1, even entirely urban parishes in the South East paid more per person in poor payments in 1831-3 than urban parishes in the west and north. Poor payments per head in the most urban parishes, those with fewer than one male in 10 employed in agriculture in 1831, followed the same regional pattern as those in the most rural parishes, those with more than 8 in 10 males employed in agriculture. This evidence starkly conflicts with Boyer's particular political economy story.

**Table 2: Urban and Rural Relief Payments by Region**

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of Parishes</th>
<th>Number of Poor Parishes</th>
<th>Number of Urban Payments</th>
<th>Most Payments per Head</th>
</tr>
</thead>
<tbody>
<tr>
<td>South East</td>
<td>24</td>
<td>401</td>
<td>£0.54</td>
<td>401</td>
</tr>
<tr>
<td>South</td>
<td>34</td>
<td>116</td>
<td>£0.28</td>
<td>116</td>
</tr>
<tr>
<td>West</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North</td>
<td>21</td>
<td>146</td>
<td>£0.16</td>
<td>146</td>
</tr>
</tbody>
</table>

**Relief Reform and Land Rents.** We measure the social cost of the poor law by the effect of the reforms on land rents in rural parishes. The basic equation we estimate is:

$$\Delta rent_i = \Delta \alpha + \beta_1 \frac{tax_i}{acre_i} + \sum_f \gamma_f CONTROLS_{f,i} + \Delta \epsilon_i$$

(1)

where $\Delta rent$ is the change in rent per acre in rural parishes between 1824-34 and 1842, $\Delta (tax/acre)$ is the change in poor rate taxes per acre in the same interval, and $\text{CONTROLS}_f$ are a set of $f$ parish control variables. The estimated value of $\beta_1$ tells us for every £1 of relief payments avoided by the reform what was the private gain to land owners. Each of the three theories of the effects of the poor relief system has a different implication for the value of $\beta$. To see this note that the reduced form above omits two other variables that are important in determining rural rents, the wages paid to workers, and the amount of capital invested in land improvement. Thus the full specification would be

$$\Delta rent_i = \Delta \alpha + \Delta \frac{tax_i}{acre_i} + \beta_2 \Delta wage_i + \beta_3 \Delta K_i + \sum_f \gamma_f CONTROLS_{f,i} + \Delta \epsilon_i$$

(2)
Where \( K \) is the capital invested per acre, and \( wage \) is the wage cost per effective unit of labor. If poor payments are just a transfer to the needy from landowners, with no effects on investment, wages, or labor efficiency, then \( \Delta wage \) and \( \Delta K \) will be zero, and the estimate of \( \beta \) from the reduced form will be \(-1\). This is the result implied by Blaug’s views.

The Poor Law Commission interpretation, however, was that poor relief was reducing investment in land improvement by driving up the cost of capital, and raising the effective cost of labor. In this case when we estimate the reduced form we will find \( \beta < -1 \). For in the reduced form it will pick up also gains in rent after reform from the lower real labor cost and the greater investment in land improvement.

On Boyer’s interpretation, where poor relief payments were mainly a replacement for wages, the reduced form estimate of \( \beta \) will actually be positive. For if we assume that wages in each rural parish are set by the wage level in the nearest urban community, then the total of poor relief plus wage payments in each parish will not change after the reform. Thus for every \( £1 \), of relief payments avoided wages have to be supplemented by a \( £1 \). But since others were paying some of the tax landowners end up paying an increased wage bill, and hence land rents fall. The system persisted for so long, argues Boyer, because it was in landowners’ interests in rural areas where they controlled poor relief policy.

The reduced form estimation above will give a biased estimate of the total effects of poor relief reforms on land rents if the changes in poor relief payments were partially endogenous. Suppose, for example, poor relief payments were cut more in 1831-33 to 1838-41 in parishes close to growing urban areas because of a more buoyant demand for labor. The growing urban areas would also increase land rents. In this case the estimated value of \( \beta \) will be biased downwards from the true value. We can control for this by including in the estimation controls for the nature of parishes in 1833. But there is always the fear of some unknown endogenous source of changes in poor rates per acre. To rule out this possibility we will also use instrumental variables where, based on the results above, we use as an instrument for cuts in poor payments per acre:

\[
\text{DHIGH}(\text{PPN}1833-35 - 0.6) \text{DEN}1831
\]

The correlation of this instrument with \( \Delta(\text{taxes}/\text{acre}) \) is 0.83, which is very good. Since the instrument depends only on features of the parish before the cuts in welfare payments it is purged of any endogenous connection between changes in rents and changes in poor rate payments in a parish after 1831-3.

Reform and Labor Allocation. The estimation above does not deal with the second cost of the Old Poor Law alleged by the Poor Law Commission, delaying migration from country to city. Boyer and Blaug, of course, both argue that the system had no effects on migration. In Boyer’s view the payment cuts after 1834 were replaced by farmers offering more winter employment.

If the Poor Law Report is correct, however, there should have been a decline in the relative population of rural parishes that had the largest cuts in poor relief payments between 1831 and 1841. To test for this we estimate the parameters of the expression

\[
\left( \frac{N_{41} - N_{31}}{N_{31}} \right) = a + b \Delta \text{PPN} + \sum_j c_j \text{CONTROLS}_{ij} + e_i
\]

where \( N_{31} \) and \( N_{41} \) are the parish populations in 1831 and 1841, and \( \text{PPN} \) are poor payments per head of population. If Boyer or Blaug are correct \( b \) should be zero. If, however, the Old Poor Law was supplementing the wages of the able bodied above the market wage rate in the countryside, rural parishes where the Poor Law Reform saw large payment reductions will experience population losses.

As with the change in rents the issue of the exogeneity of \( \Delta \text{PPN} \) again arises. Suppose parishes are subject to shocks in labor demand in a way not controlled for by the \( \text{CONTROL} \) variables. Then a parish which experienced a positive labor demand shock between 1833 and 1841 could see both a decline in relief payments per head and a larger than expected population relative to 1831. We will deal with this again by using an instrument for \( \Delta \text{PPN} \). In this case it is \( \text{DHIGH}(\text{PPN}1833-35 - 0.6) \).

The correlation of this instrument with \( \Delta \text{PPN} \) is 0.71, which is again very good. Again since the instrument depends only on features of the parish before the cuts in welfare payments it is purged of any endogenous connection between changes in poor rate payments in a parish after 1831-3 and changes in population.

Preliminary Results. Here we record the results of estimating the test equations above for a limited sample of about one tenth of the data we hope to eventually assemble. Table 3 shows the results of estimating equation (1). The dependent variable is the difference in rent per acre between farmland as a whole in a sample of rural parishes in seven counties and the average rental value per acre of plots of land in the same parishes in the years 1824-1834. The point estimates are always that a cut in poor relief payments per acre are associated with a rise in rents. But when control variables are included the result is not statistically different from 0. Since we only use a small sample of the available data here, however, the standard error of the estimated effect is what is important. Our results suggest that with all the data we should be able to estimate \( \beta \) to within 0.4 with 95% confidence. Thus we will be able to discriminate between the hypotheses that \( \beta > 0 \) (Boyer), \( \beta = 1 \) (Blaug) or \( \beta < 1 \) (Poor Law Commission).

**Table 3: The Effects of Poor Payments on Land Rents**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>OLS</th>
<th>OLS</th>
<th>IV</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{ΔPoor Expense/Acre} ) (1838-41-1831-33)</td>
<td>-1.348</td>
<td>-0.787</td>
<td>-1.407</td>
<td>-0.795</td>
</tr>
<tr>
<td>Population per acre, 1831</td>
<td>(0.488)</td>
<td>(0.530)</td>
<td>(0.510)</td>
<td>(0.655)</td>
</tr>
<tr>
<td>% farm workers, 1831</td>
<td>0.369</td>
<td>-</td>
<td>0.367</td>
<td>-</td>
</tr>
<tr>
<td>(0.365)</td>
<td>(0.375)</td>
<td>(0.334)</td>
<td>(0.338)</td>
<td></td>
</tr>
<tr>
<td>Six County dummies?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Number of parishes</td>
<td>268</td>
<td>268</td>
<td>268</td>
<td>268</td>
</tr>
</tbody>
</table>

In table 4 we report estimates of the parameters of equation (3). Population rose in the 1,498 predominantly rural parishes in our sample by much less than for England as a whole, so that most of them were experiencing significant out-migration. The average poor
payment per head in 1831-33 was £0.76, which represents more than 10% of the income of rural laboring families. With the OLS estimation there is a significant negative association between the change in poor relief payments per head and the population change. This is because parishes where poor payments per head fell saw greater population growth. But this association seems to come mainly from unobserved shocks on labor demand that both increase population and reduce poor relief payments. For with the instrumental variable estimation this association disappears.

The standard error of the instrumental variables estimate is 0.0237. This implies that we can from this sample say with 95% confidence that a £0.5 cut in poor payments per head (about 7% of family incomes) caused less than a 1.7% decline in population. With the full set of data we will be able to reduce this standard error to about 0.008. At this level of precision we will be able to estimate the effects of a substantial cut in poor payments per head such as £0.50 on population change to within a 0.8% change with 95% confidence.

But on the basis of our limited sample we can report that the population movements after the reform of the Old Poor Law are inconsistent with the law having large efficiency effects through misallocation of labor. This result is consistent with Boyer’s theory of the law, and also with the idea that poor relief was a transfer mainly to the truly indigent.

### Table 4: Estimate of the Effects of Poor Payments on Population Changes, 1831-41

<table>
<thead>
<tr>
<th></th>
<th>OLS</th>
<th>OLS</th>
<th>IV</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>ΔPoor Expense/Person</td>
<td>-0.1056**</td>
<td>-0.1347**</td>
<td>0.0037</td>
<td>0.0046</td>
</tr>
<tr>
<td>Pop Density, 1831</td>
<td>0.0137</td>
<td>0.0152</td>
<td>0.0197</td>
<td>0.0237</td>
</tr>
<tr>
<td>Fraction agricultural, 1831</td>
<td>-0.093*</td>
<td>-0.075*</td>
<td>0.038</td>
<td>0.040</td>
</tr>
<tr>
<td>Population Growth, 1801-1831 (N1/N0)</td>
<td>-0.024</td>
<td>-0.035</td>
<td>0.016</td>
<td>0.016</td>
</tr>
<tr>
<td>Six county dummies?</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Parishes 1,498 1,494 1,498 1,494

Note: * Statistically significant at the 5% level. ** Statistically significant at the 1% level.

Earnings Inequality in Late Nineteenth Century America and Britain

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Abstract. This paper studies the level and the causes of earnings inequality in late nineteenth century America and Britain using microdata from the United States Commissioner of Labor Survey in 1890 and 1891. We examine whether lessons from studies on changes in earnings inequality over time—the importance of skill, especially the skill wage premium, in explaining the changes—can be applied to explaining why America had greater earnings inequality relative to Britain in the late nineteenth century. Using Fields' decomposition methodology, we find that the skill factor is important, albeit not the most important. According to shift share analysis, the differences in earnings inequality between the two countries can be explained mainly by the greater inequality within each skill group.

INTRODUCTION This paper studies the level and the causes of earnings inequality in late nineteenth century America and Britain using a cross section microdata from the United States Commissioner of Labor Survey (1891, 1892), below denoted as COLS data. To be precise, this paper focuses on the role of returns to skill in explaining the differences in American and British earnings inequality in the late nineteenth century.

The majority of previous papers on earnings (or income) inequality examine the changes in inequality over time in an explicitly historical context for particular countries. In several papers, Williamson and Lindert suggest that the earnings inequality of both America and Britain followed a Kuznets inverted U pattern. They argue that British and American earnings inequality increased until the mid-nineteenth century and World War I, respectively, and decreased thereafter (Williamson 1980, Williamson and Lindert 1980, p. 95).

Examining the sources of the changes in earnings inequality over time, Williamson and Lindert (e.g., Williamson 1976, Lindert and Williamson 1985) pay attention to both the demand and supply of skilled and unskilled workers. Lindert and Williamson (1985) provide an interesting explanation why Britain underwent a leveling of earnings inequality at the mid-nineteenth century, while the American leveling occurred after World War I. They argue that the source of Britain’s earlier leveling is the decrease in demand for skilled workers caused by a productivity slowdown and the lack of immigration of unskilled workers to Britain (Lindert and Williamson 1985, p. 368). This contrasts with the American situation. As a result of the interaction of demand and supply of skilled and unskilled workers, the wage gap (skill wage premium) between skill groups decreased in Britain while the gap was still high in America in the late nineteenth century.

From Williamson and Lindert’s explanation on American and British earnings inequality in the late nineteenth century, we may infer that, first, skill is a very important factor in explaining changes earnings inequality over time and, second, the changes in earnings inequality are mainly explained by the changes in the skill wage premium. Note that Williamson and Lindert’s explanation was drawn by separately examining changes in earnings inequality for each country. It may be interesting to ask whether the explanation of Williamson and Lindert

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12 Criticizing Williamson and Lindert’s papers, others ask whether the historic facts match the prediction of an inverted U, especially whether earnings inequality initially increased. See Soltow (1969, 1971), Grose (1982), Lindert and Williamson (1982), and Margo and WillAfluor (1987) for the debate on America’s experience. See Soltow (1968) for Britain’s case.
can be verified from a comparative study based on cross section data from the late nineteenth century (COLS data).

To be precise, we ask two questions. First, "How much of the differences in earnings inequality between the two countries can be explained by the skill factor?" Second, "How did the skill factor contribute to the greater inequality in America relative to Britain in the late nineteenth century?" We use Fields's methodology and a shift share analysis in order to answer two questions.

DATA AND OVERALL INEQUALITY The data for this study comes from the United States Commissioner of Labor Survey of 1889-1890. The COLS data contains an extraordinary amount of information on demographic characteristics, occupations, and income sources of individuals in nine industries (bar iron, pig iron, steel, bituminous coal, coke, iron ore, cotton textiles, woollen and glass). It is one of the richest available sources for studying earnings inequality in the late nineteenth century.

Table 1 shows the mean characteristics of the sample for each country. Our sample consists of male workers aged 20-64. Workers whose occupation classification was uncertain are excluded. While age and marital status are similar, America and Britain exhibit many differences. Workers in America earn about $140 more than those in Britain. Most British workers are native-born, while only half of American workers are native-born. The rate of unionization also shows a big difference, with two times as many British workers organized. In terms of industry composition, Britain has larger employment shares for the iron and steel, mining, and textile industries, while America has a larger share for the glass industry. Finally, the skill distributions are also different: America has relatively more unskilled workers, while Britain has more semiskilled workers.

As a first step in our study of earnings inequality in late nineteenth century America and Britain, we compare overall earnings inequality using various inequality measures. We derive ratio of share of top decile to that of bottom decile (Top/Bottom), the coefficient of variation (CV), the Gini index (G), the Theil index (T), and variance of log-earnings (VLOG).

Table 2 presents earnings inequality measures for late nineteenth century America and Britain. This table shows that, for each measure, America had greater inequality than did Britain. This finding is reinforced with the Lorenz curves in Figure 1. The Lorenz curves do not cross, indicating Lorenz consistency. Our finding of lower earnings inequality in Britain is unambiguous.

DECOMPOSITION OF INEQUALITY DIFFERENCE In this section, we investigate "how much" and "how" the skill factor contributed to greater earnings inequality in America relative to Britain in the late nineteenth century. The first question (how much) and the second question (how) are answered by using two decomposition analyses, Fields's decomposition methodology and shift share analysis, respectively.

Fields (1997) devises a new method for decomposing inequality into contributing factors. His methodology considers different factors simultaneously, using the information contained in the earnings equation in order to decompose the level of earnings inequality. A factor with large "relative factor inequality weight (s_k)") contributes more to earnings inequality than do factors with smaller weights. The relative factor inequality weight for a factor k is defined as:

$$s_k = \frac{\beta_k \cdot \sigma_{sk} \cdot \rho_{sk}}{\sigma_y}$$

where $\beta_k$, $\sigma_a$, and $\rho_{sk}$ are regression coefficient for a variable k, standard deviation of a variable $a$, and correlation coefficient between a variable k and log-earnings ($y$), respectively. The first two columns of Table 3 indicate that industry and skill level have the largest weights in earnings inequality in America and Britain, respectively.

The relative factor inequality weight ($s_k$) is used to compute the contribution of each factor to the difference in earnings inequality between America ($A$) and Britain ($B$). The contribution of a factor $k$ to the difference in inequality between America and Britain is defined as:

$$\Pi_k = \frac{(s_{kA} \cdot \sigma_{A}^2 - s_{kB} \cdot \sigma_{B}^2)/(\sigma_{A}^2 - \sigma_{B}^2)}{\sigma_{A}^2}$$

where $s_{kA}$ and $s_{kB}$ are, for $t = A$ and $B$, the relative factor inequality weight of factor $k$ and variance of log-earnings, respectively.

The last column of Table 3 presents the contribution of each factor to the difference in inequality between America and Britain. A positive value means that the factor contributes to greater earnings inequality in America compared to Britain. Skill, industry, and union status contribute substantially to greater earnings inequality in America compared to Britain in the late nineteenth century. Though the skill variable is an important factor explaining the differences in earnings inequality between the two countries, its effects are not overwhelming. Industrial wage differentials may be capturing the effects of skill which are not controlled by the skill variables.

Next, we answer the second question, "How did the skill factor contribute to greater earnings inequality in America relative to Britain in the late nineteenth century?" To be more specific, "Can the differences in earnings inequality between the two countries be explained by the differences in wage premium for skilled workers?"

A direct way to answer the second question is a shift share analysis. Differences in the variance between two countries can be decomposed further as follows:

$$\sigma_A^2 - \sigma_B^2 = \sum_{g=1}^{G} \pi_{gb} (\sigma_{gb}^2 - \pi_{gb}^2) + \sum_{g=1}^{G} \pi_{gb} (\sigma_{gb}^2 - \sigma_{gb}^2) + \sum_{g=1}^{G} \Delta^2$$

where $\pi_{gb}$ and $\mu_{gb}$ are share of earnings of group $g$, and mean log-earnings, and $\Delta^2 = (\mu_{gb} - \mu_1)^2$, where $\mu_1$ is the overall mean of log-earnings, for $t = A, B$. Each component in the right-hand side is denoted as (a), (b), (c), and (d), respectively. Terms with positive
(negative) values contribute to increasing (leveling) inequality in America relative to Britain.

Table 4 shows the results of the shift share analysis. First of all, differences in composition of skill groups between America and Britain do not explain the difference in inequality between the two countries, because the total composition effects (a + c) have negative signs. Second, the main reason for greater inequality in America compared to Britain in the late nineteenth century was greater inequality within each skill group (term b). Term (b) explains more than 80% of total variance difference. Third, the difference in mean earnings across skill groups (term d), i.e., the skill wage premium, explains about 20% of the total variance difference.  

Our study based on the COLS data does not confirm what Williamson and Lindert found by examining changes in earnings inequality of each country over time. The difference in the wage premium to skill between America and Britain in the late nineteenth century was not the major factor to explain the difference in earnings inequality between two countries. It might be the case that variations of earnings inequality “over time” and those “across countries” cannot be explained by the same factors. Even though America and Britain are considered to be closest in terms of socio-economic institutions and subjects of numerous comparative studies, there might be still substantial differences in socio-economic institutions.

CONCLUSION Late nineteenth century American and British earnings inequality has been analysed using microdata from the United States Commissioner of Labor Survey (1891, 1892). Though the data contains only nine industries, the COLS data is extremely useful for international comparisons because it surveyed not only America, but also European countries.

The literature examining changes in earnings inequality over time emphasizes the importance of the skill, especially the skill wage premium. We ask whether this phenomenon is also found in the cross-country comparisons of differences in earnings inequality in the late nineteenth century. Although we do not know the exact sampling process, the findings from the COLS data help us understand earnings inequality in late nineteenth century America and Britain.

First, according to various inequality measures, America had unambiguously greater earnings inequality than Britain in the late nineteenth century.

Second, Fields’ decomposition methodology is used to examine how important the skill factor is in explaining the differences in earnings inequality between America and Britain. The skill factor, industry, and union status turn out to have large impacts on the difference-in-earnings inequality between America and Britain. It seems that the skill factor is not as much important as one might expect from studies of Williamson and Lindert on historical changes in earnings inequality.

Third, according to shift share analysis, compositional differences of skill groups acted to level inequality in America relative to that of Britain. However, the higher level of inequality in America relative to Britain was mainly because of greater inequality within each skill group. Though the greater inequality between skill groups contributed to greater earnings inequality in America, the impacts were not dominating.

<table>
<thead>
<tr>
<th>Table 1: Sample Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>America</strong></td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>(9.82)</td>
</tr>
<tr>
<td>Annual Earnings ($)</td>
</tr>
<tr>
<td>Family Size</td>
</tr>
<tr>
<td>Marriage</td>
</tr>
<tr>
<td>Native</td>
</tr>
<tr>
<td>Union</td>
</tr>
<tr>
<td>Skill</td>
</tr>
<tr>
<td>Unskilled</td>
</tr>
<tr>
<td>Semiskilled</td>
</tr>
<tr>
<td>Skilled</td>
</tr>
<tr>
<td>Craftsman</td>
</tr>
<tr>
<td>White Collar</td>
</tr>
<tr>
<td>Industry</td>
</tr>
<tr>
<td>Iron &amp; Steel</td>
</tr>
<tr>
<td>Mining</td>
</tr>
<tr>
<td>Textile</td>
</tr>
<tr>
<td>Glass</td>
</tr>
<tr>
<td>Sample Size</td>
</tr>
</tbody>
</table>

Source: United States Commissioner of Labor (1891, 1892), author’s own calculation.

1. Standard deviations are reported in parenthesis.
2. The null hypothesis tested is that the mean of America is equal to that of Britain. ** and * imply that the null hypothesis is rejected at the 5% and 10% level of significance, respectively.

<table>
<thead>
<tr>
<th>Table 2: Earnings Inequality Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Top/Bot</strong></td>
</tr>
<tr>
<td>America</td>
</tr>
<tr>
<td>Britain</td>
</tr>
</tbody>
</table>

Source: United States Commissioner of Labor (1891, 1892), author’s own calculation.
Table 3: Relative Factor Inequality Weight

<table>
<thead>
<tr>
<th>Relative Factor</th>
<th>Difference in $^2$ explained by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>America</td>
</tr>
<tr>
<td>Skill</td>
<td>0.097</td>
</tr>
<tr>
<td>Age</td>
<td>0.025</td>
</tr>
<tr>
<td>Native</td>
<td>-0.000</td>
</tr>
<tr>
<td>Union</td>
<td>0.080</td>
</tr>
<tr>
<td>Industry</td>
<td>0.169</td>
</tr>
<tr>
<td>Residuals</td>
<td>0.628</td>
</tr>
</tbody>
</table>

Source: United States Commissioner of Labor (1891, 1892), author’s own calculation.

1. Difference in $^2$ means the difference in variance of log-earnings between America and Britain ($^2_A - ^2_B$).

Table 4: Shift Share Analysis

<table>
<thead>
<tr>
<th></th>
<th>Within-Group</th>
<th>Between-Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composition</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td>Variance</td>
<td>Earnings</td>
</tr>
<tr>
<td>Differences</td>
<td>(a)</td>
<td>(b)</td>
</tr>
<tr>
<td></td>
<td>Differences</td>
<td>Differences</td>
</tr>
<tr>
<td></td>
<td>Differences</td>
<td>Differences</td>
</tr>
<tr>
<td>Skill</td>
<td>-0.004</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>(-2.38%)</td>
<td>(82.61%)</td>
</tr>
<tr>
<td>Industry</td>
<td>0.01</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>(4.45%)</td>
<td>(65.08%)</td>
</tr>
<tr>
<td>Union</td>
<td>-0.01</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>(-4.18%)</td>
<td>(83.50%)</td>
</tr>
</tbody>
</table>

Source: United States Commissioner of Labor (1891, 1892), author’s own calculation.

1. Ratio to the total difference in variance between America and Britain (0.17) is reported in parenthesis.
2. a, b, c, and d are defined in main text.

Figure 1: Lorenz Curves of America and Britain in 1890

Creating the U.S. Dollar Currency Union, 1761-1811: A Quest for Monetary Stability or a Usurpation of State Sovereignty for Personal Gain?

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The Development of Financial Markets and Institutions

The U.S. Constitution, adopted in 1789, forbade individual states from issuing their own fiat paper currency, a practice in which the states had been engaged for many decades. Monthly exchange rate and price index evidence for state fiat paper currencies relative to sterling from 1761 to 1790, and for the U.S. dollar from 1794 to 1811, indicates that this Constitutionally created monetary union did not improve monetary performance. During years of peace, the major state fiat currencies held their value against sterling, and exhibited a stationary time-series process. The monthly volatility of price indices in state fiat currencies was significantly less than the subsequent monthly volatility of the same price indices in U.S. dollars.

This evidence is shown to be inconsistent with the anti-state- fiat-paper-currency rhetoric presented at the U.S. Constitutional Convention in 1787. Offered as a solution to economic ills that were known to be phantoms or mis-specified, this Constitutionally created U.S. dollar currency union was imply a grab for additional federal sovereign power, and an effort to enhance the power and profits of the Bank of North America, at the expense of individual state sovereign power. This grab for power is shown to have been orchestrated by the Pennsylvania delegation to the Constitutional Convention, who were in turn all closely connected with the Bank of North America. This bank, founded in 1781 as the Federal Government's bank (and the first bank in the U.S.), is shown to have opposed state issued fiat currency. Evidence from market transactions for both spot exchange and for three-year-ahead forward exchanges during this period is presented to show that market traders preferred state issued fiat currency over Bank of North America bank notes as a medium of exchange. The inability of the Bank of North America to get its notes into wide circulation was costly to the bank. Dividends on the bank's stock suffered when competing against state issued paper fiat currency. When state fiat currency was finally banned by the Constitution, the rate of return on Bank of North America bank stock increased by over 300 percent.

The transition from state fiat paper currencies to the U.S. dollar currency union was a transition from individual state paper money backed by the state's taxes, to a fractional reserve (government charted, but privately run) banking system with specie as the reserves and paper bank notes as a principal internal circulating medium of exchange. This new system, however, did not, as of yet, have the ability to sterilize specie inflows or regulate the money multiplier.
(bank reserve or deposit ratios). Thus, given that the U.S. was a small country in international trade, the creation of the U.S. dollar currency union also meant that the U.S. lost complete control over its internal money supply relative to external shocks, something that state issued paper currencies had ameliorated.

The creation of the U.S. dollar currency union was intended and designed to achieve political and personal business objectives, not macroeconomic objectives. The rhetoric presented at the Constitutional Convention, and in the ratification debates, for the creation of the union was presented as macroeconomic objectives because if the supporting delegates had revealed their true intent, they never would have gained the support and votes needed to Constitutionally ban state fiat paper money.

**Internal Versus External Convertibility and Developing-Country Financial Crises: Lessons from the Argentine Bank Bailout of the 1930s**

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**Abstract.** Argentina’s money and banking system was hit hard by the Great Depression. The banking sector was awash with bad assets that built up in the 1920s. Gold convertibility was suspended in December 1929, even before the crisis seriously damaged the core economies. Commonly, these events are seen as being driven by external real shocks associated with the World Depression, despite the puzzle of the timing. We argue for an alternative, or complementary, explanation of the crisis that focuses on the inside-outside money relationship in a system of fractional-reserve banking and gold-standard rules. This internal explanation for the crisis involves no timing puzzle. The tension between internal and external convertibility can be felt when banks fall into bad times, and an internal drain can feed an external drain. Such was the case after financial fragility appeared in the 1914–27 suspension. Resumption in 1928 was probably unsustainable due to the problems of the financial system, and a dynamic model illustrates the point well. The resolution of the crisis required lender-of-last-resort actions by the state, discharged at first by the state bank issuing rediscounts to private banks. When the state bank became insolvent, the currency board started bailing out the system using high-powered money. Thus came about the demise of the currency board and the creation of a central bank in 1935, an institution that had no pretense of a nominal-anchor commitment device and no ceiling on lender-of-last-resort actions—innovations with painful long-run consequences for inflation performance and financial-sector health. As one of its first substantive actions, the central bank engineered a bailout of the banking system at a massive social cost. The parallels with recent developing-country crises are remarkable, and the implications for the institutional design of monetary and banking systems are considered.

**Summary.** In the wake of recent developing-country macroeconomic-financial crises, one of the more pressing questions confronting researchers and policymakers has been to discover what kind of money and banking regime might be optimal for a small open economy (Calvo 1996; 1998). The problem is of course acute in the context of a fixed exchange-rate regime, a system usually motivated by a desire to dampen external price volatility or discipline domestic monetary and fiscal policy in the wake of hyperinflationary experience. Such regimes can take a variety of forms, such as a discretionary central bank adhering to a peg or a more rigid institution such as a currency board with hard rules designed to “tie the hands.” Whatever the form, the key dilemma of the money-banking nexus is never far away: how can goals of external convertibility (a fixed exchange rate) and internal convertibility (a working fractional-reserve banking system) be simultaneously met?

As is well known, problems in both macroeconomic and financial areas can strike together, the so-called “twin crises” (Kaminsky and Reinhart 1999), and the exact causal relationship between the two remains an area for research. Recent events powerfully demonstrated this type of dynamic in an era of globalization, and the combination of pegged rates and weak banking systems is now seen as a major cause of the Asian crises of 1997–98. However, noting the contrast to the fragile exchange-rate regimes that just collapsed, some observers now advocate one type of institutional innovation that seemed to weather all of the recent storms. The Hong Kong Currency Board and the Argentine Convertibility Plan apparently coped well with a dismal international financial situation and are under study as possible models for more robust designs in other countries. Can these schemes be a basis for a monetary and financial design that will function well in this kind of global economic environment? We think a combination of theory and history can provide some answers.

From a historical perspective we note that the late-nineteenth and early-twentieth century experience of the periphery has much in common with the current situation. Emerging markets on the periphery were joining the ever-expanding markets of the core, there was widespread use of a fixed exchange-rate system, and fledging banking systems were learning how to function in this new environment. In our study of Argentine history we find that the present types of problems have earlier ancestors in the turbulent interwar economy. More importantly, we find that the Argentine institutional structure in money and banking changed considerably in the first decades of the twentieth century, as did its vulnerability.

World War One marked a major turning point in Argentina’s respect for maintaining a credible and disciplined money-banking regime. There was general success before 1914. The system functioned
smoothly and adhered to rules designed to protect a high reputation and maintain credibility under a conservative or quasi-narrow state bank and a rigid currency-board regime. Subsequently the money and banking authorities, supported by policymakers and politicians, chose a different path. The state bank became broader in scope, assumed a lender-of-last-resort function it could not sustain without subsidy, and ultimately dragged the currency board into a scheme to bailout the state bank and its ailing dependents, the private banks. Eventually, a central bank was created in 1935 to assume responsibility for cleaning up the mess and to take over all monetary responsibilities from the currency board.

If we are to analyze this historical episode from a theoretical perspective, we need to turn to a set of models that integrate banking and financial crises into models of currency crisis. However, the so-called first- and second-generation models of currency crises finessed the distinction between inside and outside money and the banking sector was excluded from the analysis (Krugman 1979; Obstfeld 1994; 1997). More recently, and motivated in part by the contours of the recent crises, scholars have turned their attention to the problem of the twin crises—that is, the internal and external convertibility problem. This embryonic literature draws on ideas found in some vintage papers in the literature, notably Díaz Alejandro (1985), but the theoretical base is still being developed with close attention to how we can best match the empirical regularities. In that same spirit, we draw on an older and somewhat neglected model of the money-banking nexus due to Dornbusch and Frenkel (1984), an approach previously applied to an even more distant historical situation.

The Dornbusch-Frenkel theory was developed to illustrate the short-run dynamics of the gold standard regime and the operations of the Bank of England in the crisis of 1847. This elegant model addressed the actions of two quasi-independent parts of the Bank: the Issue Department and the Banking Department. The former was concerned with outside money, the paper note issue and its gold backing; the latter dealt with inside money, and engaged in normal commercial banking operations, yet it also had a special role as the banker to the state, being responsible for handling government debt. The model traces the dynamics of gold backing for the currency (subject to external drain) and the backing of banking deposits by reserves (subject to internal drain).

This approach is notable for its multiple equilibrium possibilities. There can be a stable “good equilibrium” with high reserve ratios and a high gold stock in a strong banking environment where neither internal nor external drain threaten the system. There can also be an unstable “bad equilibrium” with low reserve ratios and a tendency to banking collapse with full internal—and possibly some external—drain. In the former equilibrium, confidence in the bank runs high, and an interest-rate defense is feasible, but in the latter case confidence is so low that an interest-rate defense is self-defeating and the drain only increases.

We think the applicability of this model to the Argentine situation in the years 1900–35 is clear: the currency board (Caja de Conversión or conversion office) was the analog of the Issue Department, and the quasi-state bank (Banco de la Nación Argentina) functioned just like the Banking Department. The two were linked to the same public-sector balance sheet in the sense that they were both government agencies and, in practice, the conversion office was eventually called on to make rediscounts to the state bank to keep it afloat. That is, the state bank (and possibly some of the big private banks) received ex post—and quite possibly expected ex ante—implicit state guarantees via a de facto banking insurance provision.

What happened in Argentina? A good equilibrium held so long as the state bank did not weaken itself and destroy confidence in the regime. This was the case, we claim, during the convertible regime of 1900–14, but it was not the case during the abortive attempt to re-activate the gold standard in 1928–29. Does the econometric evidence support our interpretation? Fitting the model to the Argentine data seems to suggest so. Does this story fit the facts? The narrative strand of our paper links theory to history by examining the pollution of the money and banking institutions after 1914, a story that corresponds to the change of trajectories in the model’s phase diagram from a path within the stable set to one in the unstable set.

What are the implications of our analysis? At one level, there are general implications for the study of the interwar period and the demise of the gold standard. We know a great deal about outside money in this era: much has been written about monetary authorities, the impact of the trilemma, and political-economy issues. Yet we know much less about inside money: the role of the financial sector as a possible source of regime inconsistency is less understood. If the lessons of the Argentine experience can be applied to other countries’ histories then we might get a better sense of the conflicts between money and banking regimes in the 1920s and 1930s, and a clearer view of the slender tightrope on which policymakers were poised. This could yield a more nuanced explanation of what many see as a still largely unanswered puzzle: why, the gold standard, a system that had functioned so well before 1914, was suddenly “unsafe for use” in the 1920s (Temin 1989; Eichengreen 1992).

At a narrower level, our work has direct implications for the institutional design of money and banking regimes. Suppose a fixed exchange-rate, or external convertible, regime is credible. Our paper suggests that commercial banks can be in a permanently sustainable situation for sure only if they specialize in administering the means of payment of the economy—that is, if they become narrow banks. Such specialization would leave riskier banking activity to other uninsured institutions such as investment houses and merchant banks (Fama 1985). This might be the only design in which one can attain the goals of both external and internal convertibility even under a very bad state of nature.

Simply put, under the traditional design of a gold-exchange standard (or currency board) and a banking regime you can only “price” outside money—but net banking deposits, the main component of inside money. In the event of a crisis of confidence, such as a Diamond-Dybvig (1983) run on deposits, the system might end up being governed by the dynamics of a bad (unstable) equilibrium from which there is no escape. Such dynamics would destroy internal and external convertibility alike, taking down the institutions of both—the currency board and the banks—with it. To sum up, having a strong and credible currency board may be no defense against a crisis if the banking sector is rotten and a nasty shock occurs. This sentiment has been often expressed in policymaking circles in the wake of the recent crises, especially by those who reject the idea of currency boards as a universal panacea. Still researchers seek more empirical support for the argument, and, given that the debate rages on, we think there is value in having explored the problem here with a more formal, theoretical and empirical treatment.
We show in our paper how a safe, quasi-narrow bank such as the Banco de la Nación, and a Caja de Conversión set up as a currency board to maintain a good reputation, were created to solve the 1890s crisis. It was hoped that, unlike their predecessors, they would never descend to soft-budget constraint activities. But external economic forces and internal political manipulations during the interwar period generated a set of challenges and temptations that disturbed the institutional design and pulled it ever so gradually off the rails until there was no possibility of return.

External discipline could not solve all the problems. The Caja de Conversión was internationally-visible, easily monitored and verified; it was a clear and sound adoption of the rules of the game, a well-behaved and consistent institution in this small open economy. Much less (internationally and domestically) visible was the financial system and its workings. In the first phase of its existence (1892–1914) the Argentine money and banking regime functioned smoothly, faced few shocks, and was little tampered with by policymakers. In its second phase (1914–34), a series of economic shocks polluted first the private banking system and then, despite a seemingly solid design to prevent bailouts and moral hazard, took down the Banco de la Nación and the conversion office as the illness spread.

The end result was the creation of an institution—the central bank—that could, with the help of opaque and dubious maneuvers by the IMIB, cover up the mess and finally throw in the towel on the idea of external convertibility. Loosening the nominal anchor was to have adverse long-run implications for inflation performance. And having no compelling restraint on the bailouts used to protect internal convertibility, the central bank embraced a lender-of-last-resort function with regard to the private banks that was to invite moral hazard and continuing real resource drains for decades to come.

With banks subject to neither supervision, nor banking laws, nor regulations, and with the mysterious ad hoc evolution of the Banco de la Nación, the system got itself on a path toward inconsistent policies. Instead of a classical lender-of-last-resort system, a free insurance or bailout scheme was the end result: This need not have compromised the conversion office and Argentina’s commitment to stable macroeconomic policies. But when the 1929 crisis hit, it was so big that the banking system’s weakness threatened a disastrous collapse of intermediation and caused a bad and further real costs. The price was to abolish the conversion office and revalue gold, once and for all losing the notion of parity that had endured since the 1899 resumption.

With the loss of a commitment to a stable external value of the currency and, in the longer run, to a stable price level, the genie—and money printing—was yet again out of the bottle. We might consider how late nineteenth century reformers such as Sarmiento or Pellegrini would have viewed these events. Both former Presidents saw Argentina as having an internal tension between progressive sectors of society seeking to create modern institutions with clear rules of the game, and conservative forces seeking to maintain a status quo where outcomes usually depended on arbitrary forces and the manipulation of power and influence. Sarmiento’s magnum opus, Civilización y barbarie, was devoted to exactly this issue. The conversion office in some sense epitomized the economic attempt at civilización, by playing to clean rules and meeting externally-verifiable standards and monitoring. The more clandestine relationship between private finance and the state, and the capacity of the private banks to obtain successive bailouts from the Banco de la Nación via political means, were more reminiscent of barbarie.

In the end, in the sphere of macroeconomic policy at least, the results seem clear. The Belle Époque was marked by prosperity in incomes, not in institutions. By accident or, we might say, by lack of design, barbarie triumphed.

THIRSTS AND THE DEPRESSION IN NORTH CAROLINA, 1927-1940

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After adapting to a new federal regulatory structure that was created and put in place during the 1930s, the Savings & Loan industry became the dominant provider of residential mortgage finance in the United States during its two-decade, post-World War II expansion. Within this structure existing firms were well insulated against competition from new S&Ls by restrictions on entry and from fellow incumbents by a 50-mile lending rule. Managers of mutually owned S&Ls were also free from internal checks on their performance because federal deposit insurance induced the members/owners of these associations to become generally passive and indifferent. The manager's job was simplified even further by narrow restrictions on asset composition and a regulatorily-based advantage in the market for deposits. The postwar S&L environment was predictable and calm, and the industry grew rapidly in absolute size and relative importance during the home building boom of the 1950s and early 1960s.

Things had not always been so cozy in the thrift industry. In particular, an expansion of similar magnitude, but of an altogether different character, had occurred during the residential building boom of the 1920s. The dominant organizational form at that time was the mutually-owned Building & Loan association, which had first been introduced to the U.S. in the 1830s to provide housing finance for the working class around Philadelphia. By the 1920s, and in fact as early as the 1880s, the B&L form had spread to every state in the nation and to thousands of communities both large and small. The B&L movement was financial innovation thinly wrapped in mutual ideology, and by the 1920s its advocates had been trumpeting its social benefits, explaining its methods, and encouraging its adoption for nearly a century. The industry was still wide open to new entrants immediately after WWI, and the number of B&Ls increased from 7,800 to 12,800 in just nine years.

Despite its national spread, B&Ls remained virtually untouched by federal regulation in the late 1920s. The industry, instead, was subject to an uneven patchwork of regulation that individual states had implemented often simply to catch up after Building & Loans had taken root and become established within their borders. At one end of the regulatory spectrum were states that required annual audits and examinations, imposed mild restrictions on entry and asset choice, and even passed "model" B&L legislation (Ohio) or created a dedicated discounting facility for thrifts (New York). At the other extreme were states like Virginia and Florida that finally passed specific B&L legislation in the mid-1920s, but even then delayed implementation for a year or more. In the middle stood the United States Building and Loan League, which had emerged as the industry's leading trade group in the 1890s. The great battle then, and
the USBLL's major accomplishment up until the mid-1920s, was to secure state legislation to outlaw the "National" Building and Loan Association movement. National associations had formed during the 1880s to extend the traditional and purely local building and loan model over large, regional markets. According to the USBLL these newcomers grew rapidly by stealing the B&L name, violating the movement's principles and threatening the industry's reputation. Therefore, when the Nationals collapsed in the 1890s, the USBLL was well-positioned to argue for legislation that precluded its reemergence.

The National episode illustrated that B&L leaders were willing to use legislation to restrict entry and to assert control over industry structure and practices, but that impulse was muted for the next thirty years as the local B&L movement focused on reestablishing itself after the debacle of the 1890s. Therefore, by the 1920s nearly all types of local building and loans were free to enter the industry and to operate within it. Again there were extremes. The majority of B&Ls were run as part-time businesses out of second floor offices—most often as appendages of the real estate or insurance business of their managing officer. Very small organizations like these had been the industry's backbone for decades, and operated throughout the country. But the B&L idea was flexible enough to also claim the much more substantial Pacific Building and Loan Association in Los Angeles that was operated by a developer named Harry Culver (of Calver City fame). Once again, leaders of the USBLL stood in the middle. These individuals were generally drawn from medium-to-large institutions that owned home offices, opened for regular business hours, and employed differentiated and increasingly professionalized staffs. "B&Ls" in the 1920s came in all shapes and sizes, operated under no fewer than 143 different apppellations, were subject to widely different state regulatory structures, and were organized under a variety of organizational plans.

The heterogeneity of the B&L industry during the 1920s, and the USBLL's concern over it, has recently been examined in greater detail elsewhere (Snowden, 2000). This backdrop suggests that the Depression provided an opportunity for thrift industry leaders to use federal regulation to impose greater uniformity and professionalization on the industry than they had been able to secure at the state level. Most important in this process was the establishment of the Federal Home Loan Bank system in 1932, some fifteen years after industry leaders had originally pressed for its implementation. The USBLL was well-represented on the FHLLB Board in Washington throughout the 1930s, and was intimately involved in designing and implementing every thrift-related piece of New Deal Legislation—a new system of Federally-chartered S&Ls, the FSLIC deposit insurance program, and the Home Owners' Loan Corporation's bail-out of building and loans and other major home mortgage lenders. By the end of the 1930s, a new, federalized thrift industry had been created along the lines that USBLL leaders could have only envisioned a decade earlier.

These Depression-era developments laid the groundwork for the industry's postwar expansion, but they also played a prominent role in its post-1970 demise. By the latter decade the same regulatory environment that had served the industry so well for two decades came under widespread attack for protecting and subsidizing incumbent firms. We know very little, however, about how the particular group of individuals who served as S&L managers during the 1950s and 1960s came to control these property rights in the first

place. In order to understand their ascendency, I submit, we must better understand how the B&L industry was transformed into its modern S&L form during the 1930s. We take a closer look at the process in this paper by examining the transformation of the B&L industry in North Carolina. Although Building & Loan origins were ethnic, urban, working class and Northern, by the 1920s they were important in urban areas throughout the nation—even those located in southern, predominately rural states. The North Carolina case is particularly interesting, moreover, because its B&L sector recovered relatively quickly and completely after its collapse during the first half of the 1930s. The goal of this paper is to sort out the role that federal regulation played in determining which institutions survived, and which ones prospered.

In 1905 the State of North Carolina placed its building and loan associations under the supervision of the Commissioner of Insurance. He reported for the first time in the following year that the state's 75 associations claimed 17,000 members and held $4.3 million of total assets. By 1918 the number of B&Ls had more than doubled (to 167), membership had tripled and total assets had more than quadrupled. The pre-Depression peak in the number of North Carolina B&Ls occurred seven years later (245 associations), for total membership in 1928 (108, 170), and for total assets one year later ($95 million). By the end of the 1920s, B&Ls were operating in all but one of the fifty-seven North Carolina cities with a population greater than 2,500, and in some 85 smaller communities. The contribution these institutions made towards financing residential building was equally impressive. Between 1920 and 1930 the number of nonfarm dwellings in the state increased from 230,000 to 344,000—B&Ls reported financing more than 52,000 new homes during just seven of those years (1923-1929).

On the eve of the Depression, the building and loan industry in North Carolina had experienced very rapid growth for more than two decades and had become the dominant provider of home mortgage finance in the state.

North Carolina was hardly unique, of course. Nationwide the number of associations increased by 46 percent during the 1920s (from 8,633 to 12,342), membership increased by 145 percent (from 5.0 to 12.1 millions), and assets by an astounding 245 percent (from $2.5 to $8.7 billion). But then came the Depression. Nearly one-half of the 12,000 B&Ls that were operating in the U.S. on the eve of the Depression had failed by 1941—some quickly, others after a long decade of liquidation. Very few of these institutions ever joined the FHLLB system, received a federal charter, or insured their accounts through the FSLIC. Another 3,000 associations survived the decade without participating in these programs. During the 1940s and 1950s, however, the numbers of these non-FHLLB member B&Ls gradually decreased (to about 2,000), and so did their relative importance. The future of the new S&L industry belonged to the remaining 3,200 B&Ls who had joined the new federal system in some capacity by 1941, and another 600 new institutions that were established during the 1930s under the new federal chartering system. These 3,800 associations together claimed about 70 percent of the industry's assets in 1941, over 90 percent by 1950, and fully 97 percent in 1960. Participation in the new federal institutions during the 1930s, therefore, identified the institutions that dominated the post-WWII S&L industry.

Tables and figures in the paper are used to describe the trends in the federalization of the North Carolina B&L industry over the 1930s, and to compare them to national developments during the decade.
The new FHILB system proved to be popular throughout the U.S. as soon as it was established. Nearly fifty percent of North Carolina B&Ls had become members by 1934, for example, and more than 2,000 thrift institutions nationwide. The overwhelming majority of these institutions were uninsured, state-chartered institutions because the federal-chartering program had just begun and the FSLL was not yet established. From 1935 on, however, insured state- and federally-chartered institutions gradually and continuously increased in importance—by 1940 these institutions claimed one-half of the nation's total thrift assets. Their combined share of assets in North Carolina, however, had reached only 30 percent by 1940 as uninsured, state-chartered FHILB members represented about one-third of the state's thrift industry throughout the remainder of the 1930s.

The relatively slow adoption of federal chartering and insurance in North Carolina reflects an unusually robust recovery in its B&L industry after 1935. Nationwide some 2,500 B&Ls failed after 1935, and by 1940 total B&L/S&L assets still remained one-third below their 1929 peak. By 1940 in North Carolina, however, total thrift assets in 1940 exceeded 1929 levels. Reflecting and contributing to the recovery was a rapid disposal of real estate on B&L books after the initial contraction—the easy as a share of statewide B&L assets fell from a peak of twelve percent in 1934 to only three percent in 1940. The overhang of real estate was much more severe nationally as it reached twenty percent of assets in 1934 and still represented twelve percent at the end of the decade. The deep and protracted collapse of the thrift industry in the U.S. drew its share of intermediated residential debt on 1-4 family homes from 50 percent in 1929 to only 29 percent in 1940. But by the latter date in North Carolina B&Ls and S&Ls held 46 percent of the mortgage debt held by financial intermediaries (including the HOLC).

By 1940, in fact, the share of residential mortgage debt held by thrifts was higher in North Carolina than in any other state. As a case study, therefore, North Carolina represents an unusual opportunity to examine how the new federal institutions were layered upon a relatively healthy and stable state system. This is in contrast to other regions of the country, such as the South Central and West (where the new Federal S&Ls and insured state-chartered B&Ls had in large part displaced existing institutions by 1940) or the mid-Atlantic and East North Central (where the traditional B&L sector languished in a protracted decline). In this paper we examine how three major components of the transformation from B&L to S&L played out among North Carolina's B&Ls--a fundamental restructuring of traditional B&L contracts, the determination of which existing B&Ls participated in the new Federal system, and the contribution to recovery made by specific Federal programs.

The "transformation from within" involved the replacement of the traditional B&L share installment contract with the modern direct reduction loan (for borrowing members) and savings share account (for non-borrowing members). We show how the original contract provided amortization for borrowers, and high returns to savers, but left the industry more vulnerable than other mortgage lenders to systematic, macroeconomic shocks. The modifications to the traditional building and loan contract fundamentally changed the risk-return profile and liquidity that associations offered to both borrowing and non-borrowing members. These were innovations that had been widely discussed in the industry in the 1920s, and were generally favored by the large, well-established associations from which leaders of the USBLL were drawn. Before 1930 these institutions already looked more like mutual savings banks than a traditional small, part-time B&L—and they had pressed for the industry to become more like savings banks in financial structure as well. Participation in most federal programs during the 1930s required that the institution adopt the new contractual structures, and we show how this "transformation from within" was hastened by federalization.

The recovery of the industry, however, was built on substantial injections of federal dollars and an entire set of new federal institutions. We briefly how USBLL leaders were intimately involved with designing and implementing all major thrift-related federal programs—the FHILB system (1932), HOLC mortgage refinancing and the new Federal Savings and Loan chartering system (1933), and the FSLL insurance program (1931). We then examine individual B&L balance sheet data and county-level control variables to assess: a) the factors that determined participation in the new Federal system and, b) the benefits provided by participation in the programs.

To shed some light on the first issue, a set of regressions are employed to determine how well a set of county-level control variables and pre-Depression balance sheet variables explain three post-1930 outcomes among North Carolina's B&Ls— their real estate holdings in 1932, liquidation status, and FHILB membership. The point of the exercise is to assess the claims made by USBLL leaders that the FHILB system was not designed to save weak associations, but to provide assistance to the strongest. Preliminary results indicate, however, that the predictors closely associated with large real estate holdings and subsequent liquidation were not significantly associated with FHILB membership. Instead, it appears that FHILB admission status was primarily influenced by the size of B&Ls before the Depression—large B&Ls were more likely to become members even though their size was associated with large real estate holdings in 1932. This evidence suggests that the USBLL used its power to design and implement a federal system that benefited the segment of the thrift industry that was most similar in size and organizational structure to the model they had favored in the 1920s. By providing these types of institutions with differential access to the new Federal system, they could have increased their chances of survival and brought the uniformity and professionalism to the industry that they had long envisioned.

For this argument to make sense, of course, it must be demonstrated that participation in the new Federal system provided its members with advantages in recovering from the Depression. We speak to this issue by investigating the factors which explain variations in the rate of asset growth between 1935 and 1940 among North Carolina's surviving B&Ls. We find that FHILB-directed Federal activity in a county, and participation in the new Federal institutions, have significant explanatory power in explaining post-1935 B&L growth across individual institutions even in the presence of an extensive set of institution- and county-level controls. The evidence suggests that most benefit resulted from the FSLL insurance programs and HOLC's refinancing activity. FHILB membership and support (measured as loans taken out by members), however, does not appear to explain which North Carolina B&Ls recovered most rapidly from the depths of the Depression.

The final version of this paper will report additional analysis that is designed to uncover the linkages between federal initiatives and B&L survival and growth in North Carolina. Specifically, we are currently
investigating whether thrift-related federal programs had an impact on county-level B&L lending shares that have been drawn from the 1940 Census of Housing. This evidence, when combined with final versions of the analysis described above, will provide a comprehensive picture of the transformation of the B&L industry to its modern S&L form in one interesting and important state.

**Understanding the Costs of Sovereign Default: The Case of the Confederate States of America**
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During the American Civil War, the Southern Confederacy obtained only one percent of its revenues from international capital markets. Foreign debt issues took the form of two small loans; cotton bonds that traded primarily in England and gold bonds in Amsterdam. The Confederacy serviced the cotton bonds for the duration of the war, while defaulting on the gold bonds, because they incorrectly believed England might intervene to secure repayment of the cotton-backed obligation. The possibility of foreign intervention induced repayment by the Southern Confederacy, as predicted by sanction-based models of sovereign debt (Bulow and Rogoff, 1989a, 1989b).

The Confederacy segmented default risk, protecting cotton bondholders, while defaulting on all other domestic and foreign debt obligations (Calomiris, 1991). Perhaps the Confederacy was aware that many high profile British subjects held large stakes in the cotton bonds. Several members of Parliament, in addition to one member of the British cabinet allegedly owned shares in the Southern security valued at more than a thousand pounds sterling (at par).

The market behavior of Southern war debt prices in Europe suggests that the Confederacy successfully segmented default risk across different classes of creditors. A time series analysis of daily Southern debt prices in Europe indicates that war news had a much larger impact on Confederate gold bond prices than cotton bond prices, ceteris paribus. The Confederacy's experience in international capital markets provides evidence that governments can undertake debt management policies that protect senior creditors even under the most extreme macroeconomic circumstances.

**Historical Evolution of Growth and Markets**

**Firms, Knowledge and Partnerships: Organizational Choice in the Old South**
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One of the central features of economic activity is that people form groups to capture gains from cooperation. Because firms are central among cooperative groups, economists have shown an intense interest in the theory and nature of the firm. In the spirit of Coase (1937), studies of the firm focus on markets and hierarchies, the consequences of investment in specialized assets, internal governance systems and agency costs caused by conflicts arising between contracting parties that constitute the firm. While most economic research focuses on the corporation, the corporation is a relatively recent social invention. Throughout history most individuals interested in forming the cooperative contractual nexus called the firm faced a choice between sole proprietorship and partnership. Given this, it is notable that economic and business historians have not studied the partnership, which stretches into antiquity, as intensively as the corporation, which became common after 1850 or so. This may represent one of the more important lacunae of "new" economic history. If the firm is central among economic organizations, and the partnership was an important organizational form among (nonagricultural) firms for a millennium or more, it is vital to our understanding of economic history that we understand the factors driving the choice of organizational form.

This paper offers an interpretation of the choice of organizational form between proprietorship and the partnership. Turning first to the historical evidence, we find that the choice of organizational form differed markedly in two broad business categories, professions and wholesale mercantile firms. A sample of more than 15,000 firms shows that about 90 percent of all professional businesses, such as attorneys, dentists and physicians, operated as sole proprietorships. On the other hand, only about 35 percent of wholesale firms operated as partnerships. By way of comparison, about 75 percent of artisans, manufacturers and retail establishments operated as sole proprietorships. Clearly, there was something very different about professional occupations and wholesale trade that led them to adopt fundamentally different business forms.

I offer two explanations for the different behavior of professionals and wholesalers. The first builds on Williamson's (1985) transaction cost economics. The second explanation, and the one focused on here, is an outgrowth of Demsetz's (1993) critique of Coase. Demsetz argues that one of the principal determinants of organizational form is the amount of direction and supervision required to achieve economic production. Craft-based artisanal production with the use of journeymen, apprentices and day laborers required substantial oversight and direction, particularly in the use of apprentices. Close supervision and intense instruction, after all, was the point of apprenticeship. Wholesale trade, on the other hand, involved less direct supervision and monitoring. In fact, capturing profits in the wholesale trade often depended on arbitrage on small price differentials. Excessive supervision and direction could get in the way of effective and profitable arbitrage, making partnerships practical because each partner had his own idiosyncratic knowledge of market movements and was provided the leeway to exercise his judgment.

**Partnerships in the Late Antebellum South.** At the second millennium there are about 20 million firms in the U.S., just 7 percent of which are organized as partnerships. For a relatively small subset of business firms, then, partnership represents an attractive organizational form. The attractions are well known. Rather than going into business alone, partners have two or more owners who share the financing and, typically, the management of the firm. One benefit of partnerships is that in bringing together two or more owners, partnerships can generally raise more capital than sole proprietorships. Moreover, by sharing responsibilities among two or
more co-owners, each partner retains a certain degree of decision making, but may be freed from some activities he or she views as unpleasant. The second potential benefit of partnership over sole proprietorship is that owners can provide complementary inputs. One partner, for example, can woo clients while the other manages routine office tasks. A third potential advantage of adopting the partnership form is that partners can realize cost efficiencies by sharing various overhead or fixed factors. Instead of two sets of employees, two physical plants and so forth, partners economize by sharing inputs.

Partnerships can also act as risk-sharing and insurance mechanisms. In many occupations partners may make significant investments in human capital, investments for which market insurance fails to appear (Gaynor and Gertler 1995, p. 593; Lang and Gordon 1995, pp. 614-15). Unanticipated shocks may generate windfall gains or destroy the value of the human capital investment. The common link is that all such shocks are uninsurable. Insurers underwrite life and health, but will not insure human capital investments for obvious moral hazard reasons. Without formal insurance, people will seek alternatives and partnerships provide one such mechanism. Pooling the human capital investments of two or more individuals reduces the likelihood that one of them will suffer a catastrophic income collapse due to unexpected exogenous shocks. Law firms, for instance, include specialists in family law, criminal litigation, tax law, estate planning partly to capture economies of scope and partly to self-insure. Partnerships allow human capitalists to spread risks and smooth income streams.

The disadvantages of partnerships are also well known. Partnerships have limited lives. If one of the partners dies or decides to leave the firm for whatever reason, it must be dissolved, its creditors paid, and any remaining assets distributed among the remaining partners or their heirs. Such limited life restrictions implies that an unanticipated event, such as a sudden and unexpected death, can force partnerships into inefficient liquidations. Additionally, partnerships face unlimited liability. The implication of the partnership's disadvantages is that entrepreneurs will generally be assiduous in screening potential partners. Because each partner accepts personal as well as professional liability for the actions of her associates, she can be expected to consider her choices carefully as she will bear most of the costs of poor judgment. This explains why most law firms bring in new partners as "associates" for a probationary period of five or six years before accepting them as full partners.

Partnerships thus grapple with the economic problem of moral hazard. Joint or team production means that it is not always a simple matter to attribute output to the individual members of the team. Because the individual team member's inputs and outputs are imperfectly measured and observed with error, each team member or partner may have an incentive to shirk or may utilize the firm's resources to his own, rather than the firm's, advantage. Holmstrom (1982) formalized this argument, and Gaynor and Gertler (1995, p. 605) find that moral hazard is extensive in large partnerships. Yet others argue that the theoretical literature often paints too dark a picture. At the formal theoretical level, Legros and Matthews (1993) show that efficient partner behavior can be sustainable Nash equilibria under fairly general assumptions about individual utility functions. Similarly, Gilson and Mnookin (1985, pp. 334, 337) argue that partnerships arise not only to facilitate diversification, but to reduce shirking by reducing the costs of monitoring. By putting partners with largely similar skill sets in close proximity to one another, each has multiple opportunities to observe and monitor the others’ actions, mete out appropriate punishments, and, thereby, reduce shirking.

Kandel and Lazear (1992) extend this hypothesis. Like Gilson and Mnookin they argue that partnerships tend to form among individuals who perform similar tasks because this allows for more effective monitoring. A common rebuttal to the economist’s assertion that free riding and other opportunistic behavior will undermine the partnership form is that most teams develop an esprit de corps strong enough to counter the moral hazard effects. This team spirit notion is appealing, and one for which a great deal of anecdotal evidence can be brought to bear, but Kandel and Lazear provide a more rigorous approach demonstrating when team spirit, or peer pressure, will be operative.

Presently, the costs of forming and maintaining partnership agreements apparently outweigh the benefits in many nonprofessional callings. Just 7 percent of all firms are organized as partnerships, compared to 74 percent organized as sole proprietors and 19 percent as corporations (Lieberman and Hall 2000, p. 115). The late antebellum business world looked remarkably different.

Information on partnerships in the late antebellum South was drawn from city directories for eight southern cities, ranging from small and rural Frederick, Maryland to large and urban Baltimore, Maryland. Antebellum city directories were the nineteenth century equivalent to the modern telephone White and Yellow Pages. Like modern Yellow Pages, these Business Directories ordered occupations alphabetically in bold type; individuals and firms pursuing those occupations then followed, listed alphabetically. Although the information provided in city directories was rudimentary in many regards (individual or firm name, occupation, address), it sheds light on the extent to which different organizational forms were chosen in an extensive cross section of occupations.

Occupations were grouped using a classification scheme similar to that developed by Ferrie (1999, pp. 209-10). Professionals include such occupations as accountants, attorneys and physicians. Table 1 aggregates the individual city figures and shows that professional firms were, indeed, quite different from most others, with 90.5 percent operating as sole proprietorships. By way of comparison, about 75 percent of artisans and manufacturers, as well as proprietorial firms operated as sole proprietorships. While professional firms were least likely to operate as partnerships, wholesale firms were most likely to adopt the partnership form. In these eight cities about 65 percent of wholesale firms operated a partnerships of one form or another.

Table 1 also differentiates between different types of partnerships. The "One & Co." category includes all firms identified with a single surname with the "& Company" added. They follow the overall occupational pattern of partnerships. They were least common among professionals and most common among wholesalers. The other partnership types are largely self-explanatory. They are divided into family companies, two partner companies, firms listing two names and an attached "& Company," and firms with three or more listed partners. Again, Table 1 shows that professional firms were much less likely to adopt a partnership than other firms. By separating partnerships into the constituent elements, we can also see that the predominance of wholesale partnerships does not flow from a
A useful theory of the firm should accommodate and explain these observed differences in organizational form between professional firms, wholesalers, and other categories including artisans, manufacturers and retailers. Demsetz (1993, p. 169) notes that if we accept the notion of the firm as a nexus of contracts, an explanation of the form it takes should focus on the extent of specialization and the use of knowledge within the firm.

**Firms, Knowledge and Partnership.** Demsetz (1993, p. 159) argues that while Coase's (1937) contribution was indisputably important, it and its extensions are seriously incomplete. A more complete theory of the firm, he argues, must give greater weight to information costs than is given in Coase's formulation. Although information plays a central role in each, "its significance is more fundamental than [Coase] contemplates." To Demsetz the firm is a not easily duplicated grouping of technologies, personnel and methods surrounded by a layer of highly firm-specific information. Business firms are repositories of productive knowledge, entities that know how to get things done, and one that accomplish it with various degrees of specialization and direction.

In Demsetz' view, a firm is a nexus of contracts that contain agreements: (1) to specialize; (2) about an expected length of association; and (3) about the degree of conscious direction to be used to guide resources. Such agreements substitute for self-sufficiency (in production) and market transactions and they are voluntarily entered into because they are productive in many regards. This productivity results, in part, from transaction and monitoring cost considerations and, in part, from considerations surrounding the acquisition and use of knowledge.

The very existence of the firm reflects the fact that knowledge is costly to produce and use. Firms exist and thrive to the extent that they are repositories of specialized knowledge and have the capability to act on it and make this knowledge productive. But simply bringing together individuals with different types of specialized knowledge will not necessarily create the kinds of synergies that makes some firms unusually successful. Realizing those synergies requires giving and taking direction. In many instances, those who produce on the basis of specialized knowledge do not actually possess that knowledge. Rather, they have their activities directed by those who do possess it. Direction substitutes for education. One explanation for the existence of the firm, independent of transaction costs, is that there may be instances where conscious direction is subject to economies of scale. The economic utilization of a "direction-giver" may presuppose the existence of several "direction takers."

The firm, then, must contract for both specialized and unspecialized knowledge, as well as direction takers and direction givers, which brings us to the question of constancy of association. Both types of services can be obtained through short-term, transitory contracts or through long-term, repeated contracts. The type of contracts entered into will depend on several factors, including the cost of transacting. Demsetz (1993, p. 174), however, emphasizes knowledge-based considerations. Continued association of certain individuals facilitates the production and accumulation of firm-specific and person-specific information. Moreover, knowledge about the firm's objectives, organization, capabilities and limitations is transmitted more economically through continuing association. On the other hand, continued association may imply long-term commitments, and commitments can imply inflexibility. Whatever benefits the firm derives from long-term, continuing association must be set against the costs of contractual inflexibility.

Demsetz's characterization of the firm can be usefully represented diagrammatically as in Figure 1. Firms exist along a continuum of length of tenure (shown on the vertical axis) from one-time, impersonal spot market transactions at one extreme to long-term repeated contractual relations at the other (complete vertical integration at this extreme). Along the horizontal axis we have full agent discretion on the right and complete direction on the left. The axes then define four quadrants that represent varying combinations of tenure and direction.

Quadrant I (following the Cartesian ordering practice) implies relationships characterized by one-time, impersonal spot-market transactions where each agent acts with full discretion. Firms are the independent contractors contemplated by Coase (1937). In terms of the classic Coasian "produce-or-purchase" dichotomy, these firm purchase, and purchase everything. They are primarily, but not solely, one-person firms where the principal and agent are one in the same and the principal engages in self-directed production. Firms operating in Quadrant I hold little interest for the present discussion.

Firms operating in Quadrant II, labeled "Egalitarian Partnerships" developed (relatively) long-term or repeated relationships but they still offered agents a great deal of discretionary decision making powers. Such open-ended or discretionary mercantile partnerships afforded each partner a degree of flexibility in consummating highly transitory investment opportunities. Partners agreed to these conditions because the transactions typically involved easily resalable goods and required few transaction-specific investments. Moreover, unanimous agreement slowed decision making, and the profitable opportunity could evaporate in the interval. At the same time, however, this explains why most such partnerships formed without family or close friends lasted no more than a few years. Once the transitory investment opportunities had passed and the loans (if any) were repaid, the costs of dissolving the firm were small. Without a kinship bond tying partners together, there was no reason not to part company when opportunities arose outside the boundaries of the existing firm.

Short-term relationships, or the ability to readily alter the nature of longer-term relationships, will be important when firms are likely to alter what, where or how they do whatever they do. More stable and structured long-term contractual arrangements are preferable when the what, where and how of firm activity is unlikely to change rapidly or substantially. The nature of knowledge and information partly determined why these firms acted as partnerships. Specialized knowledge cannot be always be hired. Capturing the benefits of specialized knowledge may require using and relying on the knowledge of others in a more equal and complementary fashion than the employer-employee relationship. Part of a firm's knowledge is fact-based, but part of it is also tacit understandings linked by some (often not well specified) theory. As such, this knowledge cannot be easily or effectively communicated between or directed by specialists. Capturing the benefits of that specialized knowledge demands that at least one specialist be given the discretion to follow his or her
entrepreneurial vision or insight or intuition or whatever it is that sets entrepreneurs apart.

In other cases, however, capturing the benefits of specialized knowledge may require direction. Quadrant III defines the nexus of most commonly associated with the firm, the archetype being the modern, vertically integrated corporation employing unionized labor. Because the corporation was relatively uncommon outside the financial and transportation sectors in late antebellum America, little more need be said about it here.

Firms operating in Quadrant IV hire mostly in impersonal spot markets and engage in substantial managerial direction. These were firms relying on employees hired on the basis of the common law doctrine of "employment-at-will," which gave both employers and employees the right to terminate employment at short notice. This was most common organizational form for most types of firms, whether artisan, manufacturing or retail in nature. Artisanal and manufacturing processes, in particular, often required highly specialized knowledge and capturing the benefits of that knowledge required that the specialist direct non-specialists in the production process. Artisanal and manufacturing firms typically relied on fact-based knowledge, which demanded more direction because certain tasks had to be performed in a certain order and under certain conditions. In such processes, monitoring and direction were essential and it was best provided by one or a few individuals, depending on the scale of operation. Manufacturing processes simply were not given to the same types of discretion as mercantile transactions. Iron making, for instance, required a specific mix of inputs included in specific amounts and combined at a specific range of temperatures. Iron production required direction; wholesaling iron did not.

Firms arise and take different shapes according to the expected length of association and the amount of explicit direction needed to produce efficiently. Delineating firms along these dimensions provide insights into why different types of firms adopted different organizational forms. Successful wholesaling required an ability to act quickly and decisively in response to market fluctuations. Partnerships were more amenable in this line than others because the form relieved one or more parties from routine organizational tasks and allowed him or her to focus on entrepreneurial activities. Moreover, the partnership form allowed for relatively long-term associations, long enough at least to see a transaction through to completion. Successful manufacturing, on the other hand, demanded direction and that the entrepreneur himself oversee routine production tasks to ensure their performance in the correct sequence. Because such processes relied heavily on direction, these firms could employ unskilled labor that, in the late antebellum era, was subject to short-term, employment-at-will contracts. The different organizational forms are easily explained.

**Concluding Remarks.** Using evidence on organizational form adopted by more than 15,000 antebellum southern firms, this paper shows that partnerships were relatively uncommon in professional occupations (doctors, lawyers and dentists, among others) and relatively common among wholesale trading firms (commission merchants, importers, cotton brokers and so forth). It offers an information-based explanation for these phenomena.

![Table 1: Proprietorships and Partnerships by Occupation in 1860 (% of firms)](image)

<table>
<thead>
<tr>
<th>Prop.</th>
<th>Prof.</th>
<th>Prop.</th>
<th>Artisan</th>
<th>Mfg</th>
<th>Retail</th>
<th>Whole.</th>
</tr>
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<tr>
<td>Prop.</td>
<td>90.5</td>
<td>79.8</td>
<td>77.2</td>
<td>75.5</td>
<td>75.0</td>
<td>35.5</td>
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<tr>
<td>One &amp; Co</td>
<td>0.2</td>
<td>6.7</td>
<td>4.2</td>
<td>6.2</td>
<td>7.4</td>
<td>17.8</td>
</tr>
<tr>
<td>Family Co</td>
<td>2.0</td>
<td>3.9</td>
<td>5.4</td>
<td>5.7</td>
<td>5.7</td>
<td>13.3</td>
</tr>
<tr>
<td>Two Part</td>
<td>7.5</td>
<td>7.8</td>
<td>11.6</td>
<td>9.3</td>
<td>8.7</td>
<td>21.6</td>
</tr>
<tr>
<td>Two &amp; Co</td>
<td>0.0</td>
<td>1.5</td>
<td>1.2</td>
<td>3.1</td>
<td>2.2</td>
<td>9.2</td>
</tr>
<tr>
<td>Three Part</td>
<td>0.5</td>
<td>0.2</td>
<td>0.4</td>
<td>0.6</td>
<td>0.4</td>
<td>2.7</td>
</tr>
<tr>
<td>All Part</td>
<td>10.2</td>
<td>20.3</td>
<td>22.7</td>
<td>25.0</td>
<td>24.3</td>
<td>64.6</td>
</tr>
<tr>
<td>N</td>
<td>1665</td>
<td>2521</td>
<td>2632</td>
<td>644</td>
<td>5797</td>
<td>2426</td>
</tr>
</tbody>
</table>

![Figure 1: Relationship Duration, Internal Direction, and Organizational Choice](image)

**Collusion in Trans-Atlantic Passenger Shipping, 129=899-1911**
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Nearly all transatlantic passengers in the years 1899-1911 arrived aboard a large steamship operated by one of less than twenty firms. These firms engaged in widespread collusion, tacitly or explicitly endorsed by governments on both sides of the Atlantic. The steamship companies maintained that such collusion was necessary in order to avoid "destructive competition," wide fluctuations in prices that would ruin firms and make society worse off. This claim is supported by a (small) theoretical literature which shows that a competitive equilibrium does not exist in industries characterized by lumpy variable costs and finely divisible demand. Most modern economists, however, would conjecture that the true motivation behind the formation of cartels is the transfer of economic surplus from consumers to producers.

We investigate whether the conduct of trans-Atlantic passenger cartels is more consistent with industry stabilization or with the transfer of consumer surplus to the shipping firms. In order to do so, we assembled from primary sources a new database that includes the number of passengers (by passenger class) transported by every trans-Atlantic carrier on each of their voyages between Europe and North America for the years 1899-1911.
Evidence supporting the efficiency hypothesis would be a reduction in total volume variability after cartel formation as firms would not be engaged in “destructive competition,” i.e., excessive price-cutting during periods of slack demand. In a similar vein, the variability of firm market shares would also decline after the formation of the cartel. Average capacity utilization would also increase, as firms would “rationalize” capacity and avoid “excessive” investments which are to be used only in price wars.

Conversely, if cartels were “anti-competitive,” i.e., if they were formed in order to transfer consumer surplus to firm profits, we would observe that the number of passengers would decrease (controlling for demand and cost shifters) after the formation of cartels, as firms would raise prices to non-competitive levels. Further, capacity utilization would fall, as firms would maintain excess capacity. Theoretical models of collusion suggest that member firms would choose to maintain excess capacity for three reasons: (i) to be able to negotiate a bigger share of the market for themselves, as high capacity makes them a bigger player, (ii) to be able to punish deviating members effectively, as excess capacity makes retaliatory price cuts more credible, and (iii) to be able to forestall entry by threatening potential entrants with devastating predatory price wars.

Preliminary results indicate that the presence of a cartel agreement did in fact reduce the flow of immigrants on any given route. The volatility of immigrant flows, as well as the volatility of firm market shares also were affected, but these results are not robust to specifications that include dummy variables that control for route-specific fixed effects.

### Background on Passenger Cartels

The transport requirements of large numbers of European migrants contributed to a substantial expansion of merchant shipping in the late 19 and early 20 centuries. The firms that participated in that business made huge investments in vessels, terminals and organizational competencies. The high level of fixed costs made the firms especially vulnerable to periods when the immigrant tide ebbed. As one potential solution, the firms began to collude.

As early as 1850 the Cunard Line and the United States Mail Steamship Company (the Collins Line) agreed to fix rates and pool earnings (Hyde, 1975). Later, with the ascendance of German shipping firms, especially Hamburg-American and North German Lloyd, and the precipitous decline of the U.S. carriers, the foci of the agreements moved to Europe. In 1886 German and British firms came to an agreement by which the German firms would not call British or Scandinavian ports in exchange for the British firms limiting their sailings from Germany and fixing rates at a higher level. This agreement, however, did not endure. In 1892 the North Atlantic Steamship Association, most comprehensive cartel contract to that date was formed by Hamburg-American, North German Lloyd, Holland-American Line and the Red Star Line of Belgium. The lines fixed rates, established exclusive territories and divided steerage passenger traffic. The cartel established a secretariat and procedures for resolving disputes (Cecil 1967). British and French lines refused to join. The British lines’ relations with the North Atlantic Steamship Association improved only after 1895, when they came to another understanding with the German firms that included dividing territories and fixing rates.

The next major disruption in the cartel occurred as a result of the organization of the J.P. Morgan amalgamation, the International Mercantile Marine Co. This firm combined several lines previously serving the trade, including the British White Star Line and the Belgian Red Star Line. International Mercantile Marine negotiated a separate agreement with the German firms that was widely perceived in Britain to be at the expense of established British firms, especially Cunard. The cartel fell into disarray and a rate war ensued that lasted from late 1903 through 1904.

An uneasy truce between the firms persisted until 1908, when two major agreements were signed for the North Atlantic and Mediterranean traffic, respectively, as well as several side agreements covering specific routes (Aldcroft, 1968; Keeling, 1999; U.S. House Committee on Merchant Marine and Fisheries, 1914; U.S. v. Hamburg-American Co. et al., brief for the United States, 1915). These agreements were comprehensive in nature - the firms fixed rates, formed a pool and agreed to respect territories. The history of passenger cartels permits us to identify periods when there were tight agreements on given routes, and periods when there were weak agreements or no agreements at all. This information is critical in order to evaluate the impact of the cartels on immigrant flows.

### Data

Our analysis requires qualitative data on the agreements covering the different routes, the firms (both cartel members and independents) serving the routes, and the immigrants that each firm carried. We obtained the qualitative data on cartel agreements from a variety of secondary and primary sources.

We collected the quantitative data on each firm’s carriage of passengers (by class) from the evidence and briefs presented in a major American antitrust suit, U.S. v. Hamburg-American Co., et al (239 U.S. 466; 1916). In January 1911, the Justice Department filed suit against the firms involved in the North Atlantic agreement for violations of the Sherman Act. The lower court ruled in that the agreement was permissible under the Sherman Act, accepting the argument of the conference lines that the cartel resulted in “the amelioration of the conditions of steerage travel” and benefitted “the safety, comfort, and health of the millions of human beings traveling by steerage.” (239 U.S. 466, at 473) Nonetheless, the Supreme Court ruled that the circumstances of the war had made the case moot.

### Methodology

A potential issue is whether the cartel formation is exogenous to short-run fluctuations in market demand. Based upon our examination of the evidence, the break-down of some early attempts to cartelize appears to be connected with the poor design of the rules rather than weak contemporaneous demand. The exogeneity of cartel formation and dissolution allows us to investigate the above questions using reduced-form estimation without the use of instruments.

A primary indicator of whether the cartel was exerting market power rather than enhancing efficiency is the impact of the cartel agreement on the quantity of immigration. To that end, we propose the following econometric specification:

\[
\ln(Q_t) = \alpha + \beta R_i + \gamma C_d + \delta t + \epsilon_t
\]

Where \(Q\) is the quantity of passengers carried on a particular route in particular quarter \(t\) year, \(R\) is a vector of dummy variables denoting
the specific routes, and $C$ is a dummy variable indicating whether there existed an agreement or not on the route at that time, and $i$ is a time trend intended to capture the secular evolution of immigration flows.

We also investigate the impact of cartel agreements on the volatility of immigration flows across time and geography by estimating

$$\ln(c_{i,t}) = \alpha + \gamma c_{i,t} + u_{i,t}$$

- Where, the residuals from equation (1). In addition, we are interested in whether the cartel agreements had a stabilizing effect on firms’ market shares. We estimate

$$\ln(c_{i,t}) = \alpha + \varphi L + \gamma c_{i,t} + \nu_{i,t}$$

Where are the residuals from a regression of the natural logarithm of firms’ market shares on firm and route dummy variables, and $L$ is a vector of dummy variables controlling for firm fixed effects. As we discuss below, we estimated alternative specifications of equations (2) and (3) that included route fixed effects and a time trend.

Results. The estimation of equation (1) indicates that the presence of cartel agreements did have a statistically significant effect (at the five percent level) of decreasing the number of immigrants. The effect is equivalent to setting back the secular increase in immigration by about fifteen months, or a 1.16 percent decrease in immigrants on any given route at any given point in time. This result lends support to the hypothesis that the passenger cartels did exert some measure of market power.

The volatility of immigration flows was also affected by passenger cartels. The absence of an agreement increased volatility by about 1.5 percent - a result that is significant at the two percent level. However, when we include dummy variables for routes and a time trend, the coefficient shrinks by more than half and is no longer significant.

Our examination of the volatility of firms’ market shares mirrors the results just mentioned, but with more dramatic effects. The absence of an agreement increases the volatility of market shares by 27.25 percent - which is significant at the one percent level. But when we control for route effects and the time trend even this strong result disappears. The estimated effect is only 1.13 percent and is no longer significant.

The results from equations (2) and (3) would seem to provide only weak support, at best, for the efficiency hypothesis. However, it is possible that the route variables are reflecting some variation in cartel organization and effectiveness across the different routes that we are not adequately controlling for with our cartel dummy variable. We are conducting further research of the cartel histories on specific routes in an effort to better specify this crucial variable.

Further, we have collected macroeconomic data for countries on both sides of the Atlantic so that we can introduce a more precise control on the demand-side, rather than the time trend. We are also preparing the database on firms’ fleets and vessel capacities that will enable us to estimate the equations on capacity utilization. These results should illuminate further the role of passenger cartels in early 20 century immigration across the North Atlantic.

Economic Growth in the European Periphery 1870-1914
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The European periphery did experience economic growth in the half century before the outbreak of the First World War. But the poorest regions of Europe showed no tendency to catch up with the most prosperous economies. We enquire why this was so, and how the growth process then differed from the great boom after 1945 or 1960.

What Was the European Periphery? Taken literally, the periphery is a geographical concept, on the edge of one or more ‘metropolitan’ or ‘core’ economies (Gunder Frank 1967). These regions or states may also be united by culture (Tortella 1994). However the preferred criterion here is poverty, as measured by GNP or GDP per head. Since data availability and reliability typically improve with the level of economic development, it follows that there is a danger of sample selection bias away from the poorest economies.

Angus Maddison’s (1994) definition of the European periphery is Czechoslovakia, Hungary, Portugal, Spain and the Soviet Union. He includes Finland and Italy in the core, although in his data as well as ours, Spanish income per head was higher than that of Finland or of Italy, both in 1870 and in 1913. Kevin O’Rourke and Jeffrey Williamson’s (1997) ‘poor European periphery’ consists of Ireland, Norway, Sweden, Italy, Portugal, Spain and Denmark - though they concede Austria and Denmark are positioned rather arbitrarily. They note that, with the exception of Portugal, they ignore the poorest part of Europe, the east and south east, purely for reasons of data inadequacy. Consequently only two of their countries overlap with Maddison’s definition, or with ours.

Adopting the income per head criterion, the 1870 European periphery in our data set includes the Balkans broadly defined, together with Russia and Portugal. If we accept the data, the break point in the income hierarchy comes between Russia/Portugal and Finland. Hungary would have been the richest member of our periphery had we divided the Austro-Hungarian empire. Relative positions were hardly altered by 1910. The sources for our estimates are given in Foreman-Peck and Lains (2000).

Dispersion and Convergence. Large gaps between the European core and periphery meant a wide dispersion of GNP per head. There are two key concepts to distinguish among tendencies to eliminate these inequalities, or convergence (Baumol, Nelson and Wolff 1994). The first is ‘homogenisation’, where per capita incomes and other pertinent variables (in our case, for Europe as a whole) grow closer. This reduces dispersion –creates ‘sigma convergence’, when for instance the coefficient of variation of per capita income diminishes over time. Faster growth ‘from behind’ – of the European periphery for instance- may lower the dispersion of national GNPs per head, normalised for sample means of different periods.

Homogenisation must be distinguished from ‘catch-up’, when ‘follower’ countries narrow the income ‘distance’ separating them from the leading economies (Baumol, Nelson and Wolff 1994). Homogenisation is neither necessary nor sufficient for catch up. The average productivity of followers could rise relative to leaders but their performance might become more diverse. Conversely, a decline
ih differences among followers may not bring them closer to the leaders.

Gross or unconditional 'beta convergence' takes place if the growth rate of real per capita GDP is negatively related to the starting level of real per capita GDP. Poorer countries grow faster than richer. It underlies 'homogenisation' or 'catch-up' and is relevant to assessments of the welfare effects of a world, or regional, economy. Beta convergence tends to give rise to sigma convergence but it is offset by shocks that increase variance of income.

Explained convergence or 'conditional beta convergence' occurs when, for example, greater investment in human capital in the form of education and health, or lower government consumption, for given levels of initial income per head, generate faster economic growth (Barro and Sala-i-Martin 1995 ch. 12; Barro 1997 ch. 1).

Residual convergence is an unexplained tendency for homogenisation, or catch-up, once an attempt has been made to control for the impact of selected variables. A reduced variance of shocks would have this effect.

The (subsequently) OECD countries of Moses Abramovitz's (1994) sample show sigma convergence, secular decline in coefficients of variation, over the period 1870-1914 (Table 1). Our European sample shows the same tendency but less marked, starting from a position of less dispersion. For 'catch-up', mean incomes relative to the UK, the OECD group (excluding the US) begin with two thirds of UK income and end with three quarters. Our sample shows a trend slightly less clear cut; only after 1890 do European followers on average tend to catch up, as UK growth slows. The lag is greater in Europe than in the OECD, with mean incomes just under half the UK's in 1870 and just over half in 1913. The poor European periphery shows no tendency to catch up at all.

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean GDP relative to UK (OECD sample)</th>
<th>Mean GDP of poor European periphery relative to UK</th>
<th>Mean GDP of Europe excluding Bulgaria and Serbia</th>
<th>Coefficient of variation (CV) of Europe excluding Bulgaria and Serbia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>66</td>
<td>n.a.</td>
<td>47</td>
<td>0.51</td>
</tr>
<tr>
<td>1890</td>
<td>68</td>
<td>47</td>
<td>29</td>
<td>0.48</td>
</tr>
<tr>
<td>1913</td>
<td>76</td>
<td>53</td>
<td>28</td>
<td>0.36</td>
</tr>
</tbody>
</table>

Source: Abramovitz (OECD sample); Foreman-Peck and Lains 2000

Models of Convergence and Dispersion. The most general model for explaining the absence or presence of convergence and catch up is desirable because it allows the elimination of hypotheses by testing against alternatives of more restrictive models. Error correction (ECE) formulations (Davidson et al 1978) encapsulate 'unconditional convergence', 'conditional convergence', neoclassical steady state growth, 'catch up', neoclassical convergence and other convergence processes, such as technological diffusion and factor price equalisation (Table 2).

Suppose there is a long run equilibrium relation or steady state in logs between, say, output per head/worker (Y) and (X), perhaps the savings rate (as in the neoclassical model) or the leader economy's output per head;

\[ \ln Y^* = \beta \ln X^* = y^* = \beta x^* \quad \text{(1)} \]

The simplest general dynamics of (1) are represented by a first order difference equation;

\[ y_{t+1} = a_x y_t + b_x x_{t+1} + b_1 x_t + e_t \quad \text{...(2)} \]

where, in equilibrium, or a steady state;

\[ y^* = y_t = y_{t+1} \]

\[ x^* = x_t = x_{t+1} \]

So

\[ y^* = (b_0 + b_1)/(1-a_1) x^* \quad \text{or} \quad \beta = [(b_0 + b_1)/(1-a_1)] \quad \text{...(3)} \]

Equation (2) can be re-arranged into an ECE by subtracting \( y_t \) from both sides and by adding and subtracting \( b_0 x_t \) on the RHS

\[ y_{t+1} - y_t = (a_1 - 1) y_t + (b_0 + b_1) x_t + b_0 (x_{t+1} - x_t) \]

\[ = (a_1 - 1) \{y_t - [(b_0 + b_1)/(1-a_1)] x_t\} + b_0 (x_{t+1} - x_t) \quad \text{...(5)} \]

Where \( Z_t \) is the 'error', or deviation of \( y \) from the long run value indicated by \( \beta x \), in period \( t \)

\[ y_{t+1} - y_t = (a_1 - 1) Z_t + b_0 (x_{t+1} - x_t) \quad \text{...(6)} \]

Growth is divided into two components, a correction of the divergence from the long run steady state, and the immediate response to changes in independent variables. \( a_1 < 1 \) if (1) is stable, so \( (a_1 - 1) = 0 \). A large negative 'error' in \( t \) causes a positive \( y_{t+1} - y_t \).

The conditional and unconditional convergence models, among others, can then be seen to be special cases of (2) or (4), where \( b_0 = 0 \). This zero restriction may be tested in the general model to select a specific model consistent with the data. A typical 'catch up' equation also sets \( b_0 = 0 \) but the \( x_t \) is the leader's income per head (Table 2).

Neoclassical growth predicts that the pace of transition or convergence is influenced by different variables from steady state (Table 2 eqns. 2 and 5). An ECE can capture this distinctive transition effect simply by 'rate of change' variables on the right hand side that are not included in the error correction term or differ from the 'levels' variables on the right hand side. For example, where \( \Delta \) is a first difference operator;

\[ \Delta y = (a_1 - 1) y + b_0 \Delta k + c_1 t \quad \text{...(7)} \]

net investment (\( \Delta k \)) here raises growth temporarily but does not influence the long run level of income. By contrast, technical progress (\( t \)) determines both the growth, and the long run level, of income.
Table 2 A Growth Equation Taxonomy

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Parameter vector</th>
<th>Implied restriction</th>
<th>Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unconditional convergence, Gibrat</td>
<td>(a₁, 0, 0)</td>
<td>0 &lt; a₁ &lt; 1</td>
<td>Shocks persistent</td>
</tr>
<tr>
<td>2. Trend growth, trend stationary</td>
<td>(0, 0, b₁)</td>
<td>b₁ &gt; 0</td>
<td>x = trend, shocks transitory; Neoclassical steady state where the trend depends upon technical progress population growth</td>
</tr>
<tr>
<td>3. Conditional convergence</td>
<td>(a₁, 0, b₁)</td>
<td>0 &lt; a₁ &lt; 1</td>
<td>Shocks persistent</td>
</tr>
<tr>
<td>4. Catch up growth</td>
<td>(a₁, 0, b₁)</td>
<td>b₁ = 1 - a₁</td>
<td>x = leader country GDP; partial adjustment form</td>
</tr>
<tr>
<td>5. Neoclassical convergence</td>
<td>(1 - (1 - e⁻b₁)₀, (1 - e⁻b₁)₁)</td>
<td>a₁ = 1 - b₁, x = steady state growth of γ; f depends upon population growth technical progress and production function parameters</td>
<td></td>
</tr>
<tr>
<td>6. Error Correction</td>
<td>(a₁, b₀, b₁)</td>
<td>0 &lt; a₁ &lt; 1</td>
<td>Various convergence processes - technological diffusion and factor price equalisation</td>
</tr>
</tbody>
</table>

Whether a steady state or a convergence model is appropriate depends upon the speed of adjustment. When the estimated coefficient a₁ is not significantly different from zero, the convergence specification is incorrect. Adjustment is 'instantaneous'; completed within the period of observation. In this case a steady state explanation of incomes is more appropriate than growth rates.

Proximate Explanations for Backwardness and Dispersion. In addition to selecting the appropriate equation form to explain European patterns of backwardness and dispersion, the key variables must be identified, and their measures. The high level variables often cited include state policy and natural resource endowments. Policies include fiscal responsibility, perhaps measured by years of adherence to a metallic monetary standards. Openness to external trade is another policy measurable by tariff rates. Market failures are supposedly common in investment in human capital, so state policy generally contributes to the extent of popular education, revealed by illiteracy rates. Infrastructure is capital intensive and therefore reflects the business environment created by policy as well as being a vital element for a dynamic economy. Natural resources were more fundamental to the lower productivity 19th century economies than those of the late 20th century. Coal in particular was often seen as essential to modern industry and transport. For the more backward economies of Europe, the highest income country to catch up was the United Kingdom.

In contrast to the partial adjustment estimate of 'catch-up', the error correction regression does explain some European variation (Table 3), but the lagged own GNP per head is always insignificant from zero (a₁=1) in (4) above, which makes steady state solutions implausible- there is no adjustment to 'equilibrium error'. Solving for steady state non-British European income per head yields a negative figure!

Table 3. ‘Catch-Up’ and Error Correction Economic Growth: OLS Regressions

<table>
<thead>
<tr>
<th>Const</th>
<th>UK GNP</th>
<th>own GNP</th>
<th>Δ UK GNP</th>
<th>Adj R²</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>-8.52</td>
<td>1.48</td>
<td>-0.25</td>
<td>-</td>
<td>0.028</td>
</tr>
<tr>
<td></td>
<td>(-1.34)</td>
<td>(1.63)</td>
<td>(-0.72)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>ii.</td>
<td>-14.69</td>
<td>2.21*</td>
<td>-0.24</td>
<td>4.15*</td>
<td>0.078</td>
</tr>
<tr>
<td></td>
<td>(-2.09)</td>
<td>(2.34)</td>
<td>(0.33)</td>
<td>(1.97)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Robust t ratios in parentheses. * = significant at 5% level.

Tariff protection does not influence conditional beta convergence, and therefore is not included in Table 4, where we report conditional convergence and error correction equations for our sample. The conditional convergence model is also estimated with lagged right hand side variables as instruments.

Table 4 Regressions Explaining European Growth Rates 1870-1910

<table>
<thead>
<tr>
<th>Constant</th>
<th>(1) OLS</th>
<th>(2) OLS</th>
<th>(3) TSL</th>
<th>(4)OLS (ECE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loggnnp</td>
<td>-0.83</td>
<td>-0.64</td>
<td>-1.07</td>
<td>-0.88</td>
</tr>
<tr>
<td>Lograil</td>
<td>0.18</td>
<td>0.14</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>Illit</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td>Δlllit</td>
<td></td>
<td>-0.07</td>
<td>-0.07</td>
<td></td>
</tr>
<tr>
<td>Adj R²</td>
<td>0.196</td>
<td>0.072</td>
<td>0.308</td>
<td>0.263</td>
</tr>
<tr>
<td>N</td>
<td>57</td>
<td>46</td>
<td>41</td>
<td>39</td>
</tr>
</tbody>
</table>

Note: Heteroscedasticity robust t stats in parentheses; (1) against (2), F= [(19.157-15.232)/11]/[(15.232/43) = 0.357/0.354 = 1.01 < Fc: 'Lograil' = logarithm of railway length, 'Illit' = illiteracy rate; Δ= forward first difference operator: N= no. of observations.

All our periphery countries had high levels of illiteracy in 1900, around 70 percent. In western Europe the index was usually well under 20. Periphery growth rates would have been raised 0.8 percent according to the conditional convergence TSL estimate, two thirds...
of the sample average, if the periphery had attained western levels of literacy. However, all the dynamic equations have convergence coefficients insignificantly different from -1. We cannot reject the hypothesis that adjustment is instantaneous and therefore a steady state relationship in levels is more appropriate.

It is much easier to explain income per head in our sample than growth rates—even with instrumenting. Tariffs, literacy and ‘standard’ alone explain 75 percent of the cross sectional variance. A similar improvement of literacy to that considered above would (TSLS Table 5) have raised average periphery output per head by nearly one half in 1890, taking these economies ahead of Italy and Finland, and almost up to Spain. If Greece, Russia and Portugal had reduced their protectionism to the levels of Bulgaria, Romania or Serbia in 1910, they could have boosted their GNPs per head by about one tenth. If Russia, Serbia and Bulgaria had matched Portugal’s fiscal rectitude by 1910, they also could have enhanced incomes by perhaps one fifth.

Table 5 Regressions Explaining European GNP per head 1870-1910

<table>
<thead>
<tr>
<th></th>
<th>(1) OLS</th>
<th>(2) OLS</th>
<th>(3) TSLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>6.687 (78.41)</td>
<td>6.659 (41.25)</td>
<td>6.755 (54.07)</td>
</tr>
<tr>
<td>LogDen</td>
<td>0.123 (5.84)</td>
<td>0.115 (4.35)</td>
<td>0.111 (3.91)</td>
</tr>
<tr>
<td>Illit</td>
<td>-0.008 (-8.46)</td>
<td>-0.004 (-2.61)</td>
<td>-0.008 (-4.76)</td>
</tr>
<tr>
<td>Tariff</td>
<td>-0.761 (-3.00)</td>
<td>-1.001 (-1.39)</td>
<td>-0.848 (-1.93)</td>
</tr>
<tr>
<td>Standard</td>
<td>0.008 (5.86)</td>
<td>0.010 (8.78)</td>
<td>0.007 (5.36)</td>
</tr>
<tr>
<td>LogCoalP</td>
<td>0.014 (2.43)</td>
<td>0.004 (0.61)</td>
<td>0.014 (2.13)</td>
</tr>
<tr>
<td>Adj R2</td>
<td>0.887</td>
<td>0.774</td>
<td>0.836</td>
</tr>
<tr>
<td>N</td>
<td>77</td>
<td>60 Excl. periphery</td>
<td>58 (full sample)</td>
</tr>
</tbody>
</table>

Note: Heteroscedasticity-robust t stats in parentheses. Comparing eqns (1) and (2) \( R^2 = [(1.739-1.281)/17] / (1.281/55) = 0.0269/0.02329 = 1.155 < Fc. In (3) instruments are lagged values. ‘LogDen’ = log of population density, ‘Tariff’ = tariff revenue to import value; ‘Standard’ = no. of years on metallic standard; ‘LogcoalP’ = log of coal production per head.

Sigma Convergence. If the fundamental determinant of European GNPs is a relationship in levels, reduced dispersion of independent variables could ‘homogenise’. In addition, if explanatory variables are decreasingly positively correlated, sigma convergence will be greater. Conversely the absence of convergence in the poor periphery could stem from their independent variable values.

Taking a model type 2 of Table 2, where \( y \) is gap per head and the x's some of the variables in the Table 5 above:

\[
y = a + b_0 x_1 + b_1 x_2 + e \ldots
\]

\[
\text{Var } y = b_0^2 \text{var } x_1 + b_1^2 \text{var } x_2 + 2 b_0 b_1 \text{ cov } (x_1, x_2) + \text{var } e \ldots\ldots(8)
\]

If \( x_1 \) and \( x_2 \) are independent and uncorrelated

\[
\text{Var } y = b_0^2 \text{var } x_1 + b_1^2 \text{var } x_2 + \text{var } e
\]

As is apparent from (8), the residual convergence already discussed, could translate for the periphery into residual divergence, an increase in \( \text{var } e \) over time.

Did shocks slow convergence in Europe before the First World War? From the viewpoint of economic history, shocks include wars and revolutions, weather and harvest fluctuations, speculative bubbles and financial crises. Residuals of periphery countries show no greater variation by decade than the rest of Europe. Such shocks as distinguished them were likely instead to be captured by the explanatory variables. Inter-country variations in illiteracy increased, as did protection and (slightly) population density (Table 6). Coal production per head showed by far the greatest inter-country variation even at the end of the period, after falling from 1870. Financial policy did exhibit some signs of sigma convergence, with the movement towards the gold standard throughout Europe.

Overall there were slightly larger shocks in 1910 than in 1870 (Table 7), as indicated by the OLS full sample residuals, but in 1890 they were slightly smaller. So this is hardly an explanation for the slow pace of sigma convergence.

Table 6 Coefficients of variation of potential explanatory variables of GNP per head

<table>
<thead>
<tr>
<th></th>
<th>Illiteracy</th>
<th>Tariff</th>
<th>Standard</th>
<th>Coal prodn per head</th>
<th>Popul density</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>0.74</td>
<td>0.73</td>
<td>1.37</td>
<td>2.40</td>
<td>0.79</td>
</tr>
<tr>
<td>1890</td>
<td>0.94</td>
<td>0.81</td>
<td>0.59</td>
<td>2.19</td>
<td>0.80</td>
</tr>
<tr>
<td>1910</td>
<td>1.19</td>
<td>0.84</td>
<td>0.48</td>
<td>2.00</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Table 7 Residuals from eq 1 Table 5

<table>
<thead>
<tr>
<th></th>
<th>SD of full sample</th>
<th>Range Residuals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>0.165</td>
<td>0.543</td>
</tr>
<tr>
<td>1890</td>
<td>0.149</td>
<td>0.541</td>
</tr>
<tr>
<td>1910</td>
<td>0.186</td>
<td>0.713</td>
</tr>
</tbody>
</table>

Table 8 Covariances of Explanatory Variables for European GNP

<table>
<thead>
<tr>
<th></th>
<th>Cov var illit and tariff</th>
<th>Cov var standard</th>
<th>Cov var tariff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>0.59</td>
<td>0.11</td>
<td>13.06</td>
</tr>
<tr>
<td>1890</td>
<td>1.81</td>
<td>-0.22</td>
<td>1.81</td>
</tr>
<tr>
<td>1910</td>
<td>1.55</td>
<td>-0.57</td>
<td>-272.36</td>
</tr>
</tbody>
</table>

It is apparent from the variance and covariances of illiteracy (table 8) that these are the principle statistical explanation for the continuing poverty of the European periphery. We now turn to explore this variable further.

‘Deep’ Explanations for Backwardness. Economic explanations for the backwardness of the European periphery can be peeled off to expose political, sociological and geographical causes further below the surface. Investment in human and physical capital, or adherence to balanced budgets and metallic monetary standards are not the most fundamental explanations for Western European prosperity. They themselves have causes such as the family system, which Maddison (1994) identifies as a basic cause of western prosperity. This was slow changing, and therefore more exogenous to economic processes than most other influences.

A major function of the family is education and socialisation more generally, in which women typically played a far greater role than men. Therefore to the extent that literacy and education mattered,
female human capital was likely to impact on economic development disproportionately. Since females were typically less literate in
europe, it is consistent with this hypothesis that Clara Nunez (1990)
finds the greater the gap in literacy between males and females the
smaller is the effect of average literacy on Spanish regional income
differences. Gabriel Tortella (1994) goes further in suggesting that
the differential gender gap in literacy between Italy and Spain
accounts for some of the more rapid Italian economic growth.

Female human capital accumulation is likely to be related to the
marriage pattern, that distinguishes the western European family
system. The fundamental components are the late age at first marriage
of women and the substantial proportion of women never marrying
(Hajnal 1965). A women whose first child is born at 25 will have
more knowledge to pass on than one who becomes a mother at 18.
Completed family size is likely to be lower with the same effect, and
more personal financial and physical capital will have been
accumulated. If so literacy and other indices of education should be
higher where women’s age at birth of first child, and therefore age of
first marriage, was higher.

Core western Europe was clearly distinguished from the periphery by
the marriage pattern. In 1900 only 11% of Bulgarian women aged 20-
39 were single or widowed, compared with 45% in Britain half a
century earlier (Hajnal 1965 p136 p119). The percentage of married
women among women aged 15 and over was below 55% and usually
below 50% in 19th century western Europe. For Serbia and Bulgaria,
the percentage recorded in the 1900 censuses was 69, and for
Romania, 65.

A simple cross-country regression supports the hypothesis by
explaining or associating 65% of the variance in European illiteracy
in 1910 with the marriage pattern. The coefficient is not significantly
different from unity; a one percent higher proportion of single women
is linked with a one percent lower illiteracy rate.

Conclusion. The poorest European economies showed no tendency
to catch up with the richer because they neglected investment in
human capital, in particular literacy. This neglect, that lowered their
steady state growth rates, was embedded in culture, especially in the
high value placed upon early female marriage in the European
periphery. Unlike the world’s economies after 1960, Europe between
1870 and 1914 was growing at steady state rates, subject to shocks
that had no persistent effects. Economies grew more alike or failed to
do so when follower economies adopted human capital investment-
friendly policies or customs.

The solid majority won by the Conservative Party in the July 1930
Canadian federal elections was in good measure the result of the
promises of the Conservative Leader, Richard Bedford Bennett, to
use tariff increases to restore economic prosperity. Once in office,
Bennett convened a special session of Parliament in September to
substantially increase tariffs. In March 1931 further increases were
enacted that raised Canadian tariffs to the highest level in history.
When less than two years later Bennett informed the House of
Commons that he was willing to enter into negotiations to bring about
reciprocal tariff reductions with the United States, it was widely
interpreted as a concession that his initial plan to restore the health of
the Canadian economy through tariff policy had failed. Why did
Bennett begin his term with a strongly protectionist policy and an
apparent indifference towards Canada’s trading relations with the
United States and end his term seeing the conclusion of a reciprocal
trade agreement with the United States as his only real hope of
remaining in office?

The explanation offered in this paper is that Bennett’s plans depended
upon the willingness of Britain and its Dominions to reduce their
trade with non-British Empire countries -- as Canada had been forced
to do with respect to the United States by the Smoot-Hawley Tariff --
and increase their trade within the Empire. Bennett hoped that this
redirection of trade would greatly expand the markets for Canadian
exports. Although this redirection of trade was central to the success
of Bennett’s plan, it had gone almost unmentioned -- and certainly
had not been emphasized -- during the 1930 election campaign.
In the end Bennett’s policy failed because Britain and its Dominions
were unwilling to redirect their trade within the Empire to the extent
that would have been necessary to significantly increase the demand
for Canadian exports. Even if they had been willing to do so, the
increase in intra-Empire trade Bennett hoped for would almost
certainly have required reductions in Canadian tariffs on British
manufactured goods. Such reductions were unacceptable to the
Conservative Party’s political base. Bennett was never able to
resolve this contradiction at the heart of his policy.

Bennett’s Ideas on Trade and Protectionism. From his earliest
days in Parliament Bennett expressed the belief that Canada would
benefit from closer political and economic ties to Britain and to the
other Dominions. He set out his ideas in an early speech in
Parliament:

I preach a new Parliament, an Imperial Parliament
where Canadians, Australians, South Africans and
New Zealanders, shall sit side by side with the
English, Welsh, Scotch and Irish and legislate for
this great Imperial Empire .... I hold out to this
House the vision of a wider hope, the hope that one
day this Dominion will be the dominant factor in
that great federation ....

He continued to make similar statements up to the time of his
assuming the Leadership of the Conservative Party in 1927:
I should like to think it is possible that the
combined wisdom and genius for statecraft of the
eminent men who guide the destiny of the British
Empire are equal to the task of bringing about an
economic union of the states of the British Empire.

__Endnotes__

1. Our Balkan growth rates are considerably lower than
those of David Good and Tongshu Ma (1999) who for 1870-1910
estimate Bulgaria at 1.3%, Serbia at 1.7% and Romania 1.4%, using
a ‘short cut’ regression approach. They have no estimate for Greece,
but a trend line fitted to Kostelenos (1995) national income series
yields an average of under 0.5% p.a. for 1860-1912. This is more
consistent with the 0.5% pa growth we have for Bulgaria and Serbia,
and 1% for Romania.

__Retreat from Protectionism: R. B. Bennett and
the Movement to Freer Trade in Canada, 1930-35__
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that will more than compare with the United States of America...*

Once Bennett became Leader, however, he was obliged to soft-pedal his ideas on the greater integration of Canada into the Empire. French-speaking voters in Quebec were strongly opposed to such a policy and manufacturing interests closely tied to the Conservative Party were strong supporters of the protective tariff. Anything approaching an economic union with Britain would have been a threat to a number of Canadian manufacturing industries, most notably steel and textiles.

When Bennett took office he was in the awkward and, ultimately, politically and economically untenable position of trying to bring the Canadian economy out of recession by a substantial increase in exports to other Empire countries, while at the same time having pledged to increase protection for domestic Canadian manufacturing. Pushing for an Empire-wide free-trade zone - without which it is difficult to see how it would have been possible to bring about his dream of a British Empire as economically integrated as the United States - would hardly have been politically feasible for a leader of the Conservative Party in the best of times, and had been largely foreclosed by the protectionist campaign Bennett had run in 1930.

Bennett had been in office only a few months when he left for England to attend a previously scheduled Imperial Conference. At this Conference Bennett attempted to begin the process of expanding intra-Empire trade. In Bennett's view, it was only by imposing tariffs on non-Empire imports into Britain that the British could provide the preference for Canadian products that he desired.

At the time of Bennett's appearance at the Imperial Conference, the positions of the British Labour and Conservative Parties on protectionism were rather unsettled. The May 1929 British election had brought into office a minority Labour government headed by Ramsay MacDonald. Despite high unemployment, the Labour government was reluctant to break with orthodox economic policies on trade. Britain remained in 1930 by far the most open major economy in the world. Moreover, Labour was committed to attempting to revive exports of coal, textiles, and iron and steel, and MacDonald believed that for Britain to raise tariffs would undermine his attempt to bring this about.

Among Bennett's allies within the British Conservative Party support was building around Lord Beaverbrook's proposal for Empire free trade. In a speech to Parliament in early November, Neville Chamberlain endorsed this idea and argued that it might well lead to Imperial self-sufficiency in a relatively short period of time. Bennett felt obliged to separate himself from such ideas by making clear that his own proposal entailed the maintenance of protection for Canadian industry:

The basis of the proposal is the adequate protection to industries now existent, or yet to be established. Because of this, we must ensure a certain flexibility in the preferential tariff... It follows, therefore, that this proposed preference should not be considered as a step towards Empire free trade.

Bennett's attempt to walk the fine line of encouraging Empire trade while rejecting Empire free trade generated little enthusiasm in England. Lord Beaverbrook, wrote of his reaction to Bennett's speech: "I was crushed. It was impossible at that moment to assess accurately the damage this declaration would do to our cause of Empire Free Trade," Beaverbrook was at such a loss to account for Bennett's seemingly contradictory position, that he ended up concluding it must have been meant as a personal affront to him:

My spirits revived slightly when on reflection I argued: Bennett of course did not believe in his denunciation of Empire Free Trade. He was punishing me because he considered I had failed to support his campaign at the General Election in Canada.

Perhaps unsurprisingly, when the Conference ended in November Bennett came away with little more than a rather vague promise by the British government to promote Empire trade by means other than preferential tariffs and a commitment that another conference, this time devoted exclusively to economic issues, would be convened within six months. In the end, this conference was postponed and finally opened more than a year and a half later in Ottawa on 21 July 1932. The Ottawa conference represented Bennett's last important opportunity to rally support for his plan to revive the Canadian economy by expanding intra-Empire trade.

**Political and Economic Developments Leading up to the Ottawa Conference.** As Bennett looked forward to the opening of the Imperial Economic Conference in Ottawa, the political situation in Britain changed in a way potentially favorable to his plans. The deepening economic crisis had led to a split between Ramsay MacDonald and most of the leadership of the Labour Party; in August 1931 he had formed a National Government, which included the Liberal and Conservative Parties. The National Government was returned to office by an overwhelming majority in the general election of October 1931. By this time, Britain's abandonment of free trade had become all but certain. Neville Chamberlain, now Chancellor of the Exchequer, proposed a 10 percent tariff on nearly all imports, including those from the Dominions. Most raw materials and food products, including wheat, were to be exempted from the tariff. Bennett was surprised and disappointed to learn that the new tariff would be levied on products from the Dominions.

He successfully rallied support within Britain for exempting the Dominions and Chamberlain announced that no tariffs would be levied on Dominion products pending the outcome of the Ottawa conference. Some members of the British cabinet believed that the exemption for the Dominions should only be maintained if the Dominions were willing to make tariff concessions on British exports to them. In May, J. H. Thomas, British Secretary of State for the Dominions, sent a telegram to Bennett:

His Majesty's Government in the United Kingdom[8] view throughout has been that continuance of concessions within the framework of the Import Duties Act after the 15th of November could not be justified to public opinion and affected interests here unless balanced by reciprocal concessions....
From Bennett’s point of view, however, a necessary precondition for the success of his policy had been fulfilled: Britain had abandoned free trade. It had become at least possible that with hard bargaining he might be able to use the Ottawa Conference as a vehicle for greatly increasing Canadian exports to Britain.

The urgency of attaining this outcome had been increased by the continuing deterioration in the economic situation in Canada. Bennett’s many speeches during the 1930 campaign in which he had promised to bring about a quick end to unemployment were coming back to haunt him politically. Speaking in the House of Commons in early February, the Liberal Party Leader, William Lyon Mackenzie King quoted from a number of those speeches and then observed:

My right hon. friend [i.e., Bennett] is telling the country to-day that he is seeking to redeem his promises, and he points to the way he has raised the tariff and, as some of his followers did to-day, to the millions of dollars he is expending from the public treasury. But may I point out to him and to others that those were not his promises, that he would raise the tariff, that he would spend millions of dollars of public money for unemployment relief, and so on. The promises were that he would end unemployment, and that he would find markets; these other things the tariffs and the expenditures, were the means to that end.

Bennett’s response was that poor economic conditions in Canada were the result of a world-wide Depression that was beyond his control. This observation was of little help politically. The future of Bennett’s government had become strongly dependent upon his ability to extract concessions from Britain that would significantly increase the British market for Canadian exports, while at the same time resisting the demands the British delegation was sure to make for Canada to lower its tariffs on British manufactured products, particularly textiles and steel.

The 1932 Ottawa Imperial Economic Conference. Bennett’s initial strategy for the Ottawa Conference was to get the British to agree to extend their tariff to raw materials and food products -- or, at least, to wheat and wood products, the commodities most important to Canada -- and to make permanent the Dominion exemption from the tariff. In exchange Canada would be willing to reduce or eliminate tariffs against Britain on certain manufactured goods. But Bennett had difficulty in identifying industries where protection would be reduced. As a result, even as the conference began he had no clear idea of what concessions he might offer the British. Finally, Bennett decided to switch to a strategy of offering to raise further the tariffs on non-Empire products with which British imports would compete, rather than offering to lower tariffs on British imports. This was not a proposal with which the British were likely to agree because the markets they wished to enter were those -- primarily in steel and textiles -- where existing tariffs were so high that imports were negligible and high-cost Canadian firms predominated. The British delegation was expecting a reduction in existing tariffs on British exports to Canada rather than further increases in Canadian tariffs on imports from non-Empire sources, which in practice would be of little use to them.

The conference dragged on for a month, making little progress. The key sticking points were Bennett’s extreme reluctance to reduce the degree of effective protection enjoyed by Canadian industry and the British delegation’s reluctance to increase tariffs on non-Empire imports into Britain. In the end, to avoid the political embarrassment entailed by a complete breakdown of the conference, a limited agreement was reached. Although the other Dominions were present at the conference, the negotiations between Canada and Britain resulted in what was in effect a bilateral trade agreement. The key to the agreement was Bennett’s willingness to accept a proposal by Neville Chamberlain that the Canadian tariff would be set so as to equalize the difference in production cost between Canadian and British producers. The determination of what this level might be was to be left to a Tariff Board before which British manufacturers were to be allowed to appear on an equal footing with Canadian manufacturers. In exchange for this Canada was to continue to be exempted from the British general 10 percent tariff and Britain was to end its trade agreement with Soviet Russia -- which, according to Bennett, had resulted in lumber and wheat being dumped on the British market at below production cost.

The agreement at the conference was not without benefit to the Canadian economy. Canadian merchandise exports to the United Kingdom increased from about $174 million (or about 29 percent of total Canadian exports) in 1932 to about $228 million (or about 43 percent of total exports) in 1934 and to about $291 million (or about 38 percent of total exports) in 1935. But there could be no doubt that Bennett had not brought off the far reaching reordering of Canada’s international trading relations that the Canadian public had been led to expect. Moreover, the recovery from Depression during Bennett’s two remaining years in office was slow.

Movement Toward a Reciprocal Trade Agreement with the United States. In the face of the weak recovery of the Canadian economy and the limited results to be expected from the Ottawa agreements with Britain, Bennett turned toward attempting to revive Canadian exports to the United States. Bennett had shown no interest in trade negotiations with the United States until after his attempts to expand Canadian exports to Britain and the Dominions had largely failed. Bennett’s first public indication that he would be interested in negotiating a reciprocal trade agreement with the United States came in February 1933. He claimed his position was consistent with the stance of Canadian governments, Liberal and Conservative, for many years, but it was evident to most that a change in policy had taken place. Mackenzie King was quick to note the point:

I noticed that in speaking the Prime Minister enlarged the Liberal attitude somewhat and termed it the attitude of this parliament. Now, I regret to say that review of the debates of this parliament would not disclose any such acquiescence by hon. gentleman opposite in the Liberal point of view.... [My right hon. friend, if he believes what he says at this moment, has experienced a change alike of heart and of mind as a consequence of the changed conditions that have come about of recent years.

Unfortunately for Bennett’s rapidly dwindling chances of remaining in office, the negotiations were protracted. One stumbling block was
that control of tariff policy in the United States lay with Congress. Apparently reluctant to provoke a political fight that might distract from his domestic agenda Roosevelt waited until March 1934 to ask for legislation to negotiate with other countries agreements for joint tariff reductions, not requiring Congressional approval. This legislation, the Reciprocal Trade Agreements Act, was passed by Congress in June 1934. Even then the public announcement of an intention to negotiate with Canada (which was required under the Act) only came in January 1935.

Another difficulty was the conflict between British preference rates written into Canadian tariff law and the provision of U.S. tariff law requiring that it receive “most-favored nation” status. For Bennett, a good part of whose career was based on the attempt to disentangle Canada from its trading relations with the United States and to strengthen Canada’s role within the British Empire, putting Britain on a par with the United States with respect to trade was apparently too much to take. He also believed himself on firm ground in resisting this request because Britain and the Dominions had always held the position that for purposes of foreign trade agreements they were, in effect, a single unit whose internal relations were not subject to most-favored-nation considerations.

In the end, serious bargaining over a reciprocal trade agreement did not begin until August 1935. Bennett considered the opening American position to be inadequate because it appeared unlikely to result in a significant increase in Canadian exports to the United States. A second round of negotiations was planned, but Bennett was obliged to set the next federal election for October and it was decided to suspend the talks pending the outcome of the election. As had come to be widely expected, Mackenzie King scored an easy victory in the election, capturing 173 seats to 40 for the Conservatives and 32 for third parties. Bennett’s political career was over and he soon retired to Britain.