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# Cliometrics: A Market Account of a Scientific Community (1957-2006)

Angela Milena Rojas

**–Introduction. –I. A Pseudo-market for Scientific Communities. –II. The Golden Age: 1957-1975. –III. Internal Contraction and International Diffusion: 1976-1990. –IV. Toward Disciplinary and Global Integration: 1991-2006. –Conclusions. –References.**

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***Cliometría: Una comunidad científica en el pseudo-mercado del conocimiento (1957-2006)***

***Resumen:*** *Este artículo tiene como objetivo evaluar las principales contribuciones de la cliometría en la integración global y disciplinaria de las ciencias sociales. A través de una analogía de un pseudo-mercado del conocimiento son analizadas las presiones y respuestas que los cliometristas han enfrentado en tanto una empresa cuyo objetivo es proveer respuestas a ciertas preguntas que la sociedad formula. Basado en una valoración general de los productos cliométricos se encuentra que esta comunidad científica norteamericana revolucionó la práctica de la historia económica y ganó terreno frente a la competencia representada por la historia tradicional. Posteriormente, los cliometristas difundieron sus innovaciones internacionalmente, pero atravesaron divisiones internas que en última instancia han enriquecido sus prácticas y llamado a cooperar con otras comunidades científicas.*

***Palabras clave:*** *cliometría, nueva historia económica, metodología en historia económica, comunidad científica, paradigma de investigación científica, métodos en ciencias sociales. Clasificación JEL: N01, A12, B41.*

***Abstract:*** *This paper aims at assessing the main contributions of cliometrics toward the global and disciplinary integration of social sciences. Through an analogy of a pseudo-market of knowledge it develops an analysis of pressures and responses that cliometricians have faced insofar as an enterprise whose goal is to provide answers to certain questions that society asks. Based on a general appraisal of cliometric-like products, it is found that this U.S. scientific community revolutionized the practice of economic history and gained terrain before the competing traditional history. Subsequently, cliometricians spread their innovations internationally but got through internal divisions which ultimately have enriched their practices and prompted them to cooperate with other scientific communities.*

***Keywords:*** *cliometrics, new economic history, methodology in economic history, scientific community, scientific research paradigm, methods in social sciences. JEL classification: N01, A12, B41.*

***Résumé:*** *Cet article évalue les principales contributions de la cliométrie dans le processus d'intégration globale et disciplinaire des sciences sociales. A travers l'utilisation d'une analogie concernant l'existence d'un pseudo-marché de la connaissance, on fait une analyse des questions et des réponses auxquelles les cliométristes ont fait face en tant qu'entrepreneurs, dont leur but est celui de fournir des réponses aux questions formulées par la société. L'appréciation générale des produits de la cliométrie se trouve dans l'impacte sur la communauté scientifique aux Etats-Unis, laquelle a bouleversée l´étude de l'histoire économique face à l'étude de l'histoire économique traditionnelle. Ultérieurement, les cliométristes ont diffusé leurs découvertes au niveau international mais ils ont été victimes des divisions internes qui ont entrainé un enrichissement de leur savoir-faire tout en faisant appel aux autres communautés scientifiques.*

***Mots clés:*** *Cliométrie, nouvelle histoire économique, méthodologie de l'histoire économique, communauté scientifique, paradigme dans la recherche scientifique, méthodes des sciences sociales. Classification JEL: N01, A12, B41.*

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## Introduction

The modern period in economic history began properly in the latter part of the nineteenth century in Britain, Ireland and Germany, where the field was seen as a separate discipline. Only in the earlier twentieth century, did U.S. scholars come into the field. The tension between the use of theory and detailed historical knowledge as methods pervaded the discussions of the British and German historical schools and the American institutional school. It is after the Second World War when a substantial change took place in the field led by American economists with the emergence of cliometrics. Cliometrics would bring a dynamic development of this disciplinary hybrid, nonetheless, not absent of contradictions and criticisms. Other terms such as new economic history, quantitative economic history, econometric history and historical economics have been associated with this approach at different times and connotations.

This paper aims at understanding the evolution of cliometrics. The main goal is to show how this approach to study the economic past has emerged,

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diffused and evolved to assess its main contributions toward building more meaningful social sciences. By shedding light on this evolution the extant and coming generations of economic historians will be better equipped to discern valuable achievements from old battles fought by traditional historians and cliometricians as well as among those also called new economic historians and economists. Coming generations need to get rid of artificial dilemmas like those posed by a traditional and a scientific method of research in history and overall the traditional dilemmas brought by the artificial opposition between science vs. humanities and philosophy (Wallerstain, 2004). I believe that cliometrics have brought powerful tools to enrich the scholarship in economic history but users of such tools need to be methodologically informed in order to widen their comprehension of historical analysis.

To accomplish this article's goal I find it useful to use an analogy from economics which is to consider cliometrics as a collective enterprise managed by a scientific community whose goal is to provide or produce explanations of a set of questions that society asks. Historically, scientific communities emerged as organizations devoted to methodically produce knowledge following a nineteenth-century structure of social sciences; that is to say, through disciplinary divisions sanctioned by modern universities. In the twentieth century, market forces prominently drove human and non-human capital investment, leading scholars and their societies build market-like mechanisms to the resource allocation problem of creating knowledge with limited resources and alternative uses. Thinking of a pseudo-market of knowledge helps us observe more systematically pressures and responses that cliometricians have faced insofar as an enterprise that has competed, exchanged and evolutionarily cooperated with other scientific communities. This analogy fits particularly well since this U.S. scientific community, and overall U.S. academia, has shown to be pervaded by market-like mechanisms of competition (Coats, 1980). What this analogy seeks to underscore is the role played by cliometricians in building richer social sciences. This is a point not explicitly developed by the most recent studies on U.S. cliometrics like Greif's (1997a) and Lamoureaux's (1998). These articles are methodological reviews concentrated on either showing cliometricians' latest developments or criticisms. This article draws upon these assessments but goes beyond by framing them as part of this scientific community's evolution.

In tracking this evolution, accounts of insiders —American cliometricians and economists—, provide the foundations. In these sense, this account is

mainly "internalist" and has a modest scope. A depth analysis which takes into account external criticisms from other thought schools, the relationships of cliometricians with other communities inside and outside economics, and the role of politics, power an authority is still required. The latter elements would help to craft a complete picture truly based upon the sociology of science. Clearly, this article just offers a first piece of the picture; besides, it was not meant to be a historiography of the field although it refers to main works and trends in U.S. publications previously identified by other authors. The article develops as follows: the next section explains the analogy of a pseudo-market of knowledge for scientific communities. Section two applies previous section's framework to the first stage of cliometrics called the golden Age (1957-1975), identifies its scientific research paradigms (SRP) insofar as its production function and tracks the growth and diffusion of cliometric products. Section three and four make the same analysis for the years of domestic contraction and international expansion (1976-1990), and the recent evolution (1991-2006). The article concludes with a general appraisal of cliometrics' contributions toward the integration of social sciences.

## I. A Pseudo-market for Scientific Communities

In this pseudo-market of knowledge there are two forces, demand for and supply of knowledge. Individuals articulating these forces are goal seekers and are constrained in their activities. The demand is represented by a specific society, which poses a set of questions to be answered by scholars. Here, society is the principal and scientists are the agents. A society has preferences given by its history, ideology, and social structure, which determine the kind of questions to ask. A society derives welfare from the answers as long as they address problems related to social organization and material development. This instrumental assessment of knowledge drives society's demand and highlights that knowledge has a value insofar as it has a social use. But a society also has limited resources and competing uses to afford scientific communities' activities. This is why preferences and level of resources will drive society's demand for scientific knowledge.

The supply is provided by a scientific community, which is an organization whose goal is to provide answers to society's questions. It looks for useful knowledge but also seeks prestige and authority before competing scientific communities. This element introduces agency costs and risks to society.[1] The distinctive characteristic of a community is its scientific research

program, which would correspond to its production function. A scientific research program (SRP) is an interpretative framework characterized by a hard core surrounded by a protective belt of auxiliary hypothesis. The hard core contains a set of articulated beliefs, irrefutable by the methodological decision of its practitioners, while the protective belt is intended to empirical verification (Blaug, 1986, p. 239). These elements eventually evolve and structure a set of theoretical concepts, or a theory. The later is defined as a set of logically articulated propositions that effectively explains a general phenomenon. Like a production function, a SRP entails a technological level. Technology includes organizational (associations, journals and the like) and material means (infrastructure, software, laboratories and so on) used by the community.

Coordination among supply and demand takes place through mechanisms entailing the institutional structure of both society and the scientific community. At the end, a valuation of getting an answer must result. While a society is able to appraise scientific work —whatever its criteria and imperfectly done—, a scientific community is able to asses its accomplishments and failures as well —again whatever its criteria—. For the sake of simplicity, assume that this complex process could be summarized through a measure called "social price", which would be attached to a piece of new knowledge.

The demand curve is the negative-slope curve, reflecting that more knowledge would be demanded if the social price decreases. Nonetheless, a positive-slope demand curve may reflect cases like spatial exploration, where a high social price goes with an increase in the demand. Shifts in the demand curve are due to changes in society's preferences and level of income. Displacements obey to changes in the social price, keeping other factors constant. The elasticity will indicate society's responsiveness to new knowledge. A high (low) elasticity would set the stage to thriving (sickly) scientific communities.

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[1] To pursue a research program practitioners in a scientific community need scientific and social support to justify and afford their intellectual exercise. Society has to deem the community's activities relevant and promissory. Once the community has grown and specialized, society partially loses its ability to judge communities' accomplishments. Thus, society has to rely on competition among communities. The agency risk could be necessary to the advance of science because important queries not posed by society can be pursued autonomously. Also, this risk is necessary to subvert situations in which society is interested in questions as massive destruction or racial extermination.

The supply curve is a positive-slope curve indicating that more knowledge will be created when the "social price" increases. Observing rising amounts of new knowledge and lower social prices could be explained as outward shifts in the curve due to technological advance or the adoption of a new SRP (innovation). Changes in input costs —mainly labor— could shift the curve as well. Again, displacements along the curve, given certain technology and structure of input markets, obey to changes in the social price. The elasticity shows the SRP's productivity and therefore its progressiveness. A research program is theoretically progressive if it explains more real phenomena and "predicts novel, hitherto unexpected facts" (Blaug, 1986, p. 239). When this does not occur, the SRP is degenerating and the "scientific productivity" stops growing. Then, higher elasticity would indicate a progressive SRP and/or a technological advantage. A lower elasticity would point to a sluggish productivity and/or an inappropriate technology.

The key input is human capital because this input will produce both pieces of knowledge and management to get resources from the society. Potential practitioners face a labor market in which there is a demand for their services and a supply of them. The SRP specifies the human capital that a community demands. The labor supply of intellectual effort follows an individual calculus of profits and losses, but it is also driven by the community tradition and contagion effect.[2] Not only are scientists like the same self-interested individuals they talk about, but also they are embedded in a specific social structure with institutions and codes for collective behavior.

The cost that potential members face is the investment in human capital. The benefits refer to the scope of the scientific achievements and the derived institutional and personal benefits like stable jobs and prestige. The individual calculus will also reflect the opportunity cost of inscribing in a particular SRP instead of a competing one. The potential practitioner is constrained by his/her intellectual skills, the level of income and the educational opportunities. The relative real remuneration, which includes wage and professional benefits, is the signal to coordinate labor demand for and supply of scholars.

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[2] Dumke (1992) uses the conceptual framework for adopting innovations to the diffusion of cliometrics in Europe. Previously, Field (1987) used concepts from the price theory to analyze market forces that economic historians' community must dealt with. Whaples (2002) suggests the idea of a supply and demand of Economic history although he does not develop it.

Competition among scientific communities improves the quality of scientific reasoning through intellectual arbitrage. Also, SRPs may exhibit knowledge spillovers determining the scientific progressiveness. This is at the very heart of Lakatos' reasoning: a SRP is a cluster of interconnected theories since isolated theories are not appropriate units of appraisal (Blaug 1986, p. 238). Likewise, a successful scientific community will diffuse its methods and results. Institutions organizing scientific communities and ideologies come to mind as initial constraints for an SRP's diffusion.

## II. The Golden Age: 1957-1975

### *A. The Establishment*

The postwar world posed the reconstruction task and infused the idea of progress. Economists, mainly from the U.S. and Britain, engaged in understanding the underlying mechanisms of long-term economic growth. They wanted to provide guidelines to underdeveloped countries as well as to address economic disparities in developed economies whereby showing the virtues of capitalism (Coats, 1980). Studying economic growth demanded quantitative information like output and input measures and undertook projects to construct historical national accounts in several western countries. In Britain, Dean and Cole and later on Crafts led the project, while in the U.S. Kuznets was the main figure (Aerts and Van der Wee, 2001, p. 4105).

The project was framed into the disciplinarization of economics in the U.S. during the late 1930s and 1940s. The project emphasized the adoption of more sophisticated mathematical techniques such as linear programming, operations research, and input-output analysis (Coats, 1980, p. 198). Soon in graduate programs, economic theory began to crowd out institutional economics, traditional economic history and language requirements (Williamson, 1991, p. 21). This redefinition of economics was undertaken at the outset of a baby boom and a world economic expansion. The prosperity of the U.S. economy was transmitted to academia, where the demand and supply for college education greatly increased, setting out a burgeoning scenario for academic work (Field, 1987, pp. 7-10).

Cliometrics was born in the 1950's in U.S. economic departments, originally at Purdue University. There, a group of economists and economic historians was approaching the U.S. economic history based on the extant economic theory, the new data sets and primitive computers to process the

data. The term cliometrics was coined during a conference of the American Economic History Association in 1957 (Williamson, 1991, p. 23). Three years later, the first annual cliometrics meeting was held and the cliometric production would soon dominate the pages of the *Journal of Economic History (JEH)* and *Explorations in Economic History*. From the 1960's onwards the American Economic History Association would be controlled by these newcomers (Goldin, 1995, p. 23). Cliometricians would find funding not only in the government but also in private foundations whereby the community had an initial patronage for their activities (Field, 1987, p. 7; Williamson, 1991, p. 23).

Unlike in Britain, where economic history was a separate discipline and developed their own departments, in the pre-1950s U.S., economic historians could be found either in history or economic departments (Engerman, 1996, p. 221). After cliometrics' emergence, American economic history was dominated by economists. This scientific community grew up in a local environment in the absence of strong traditions and old institutions that could have moderated its initial development as it occurred in Britain (Crafts, 1987a, pp. 37-42). The postwar U.S leadership and the Western European decline, except Britain, diminished the contact of American scholars with other European traditions in economic history. Also, the competition with politically risky paradigms as Marxism led cliometrians to be "viscerally conservative" (Hodgson, 2001; Coats, 1980, pp. 204). Although the traditional historians and other European economic historians sustained a visible and contending role, cliometricians flourished in a relatively isolated domestic scenario in which they tackled fundamental questions about American economic growth in the nineteenth and twentieth centuries.

Cliometricians formed a new community with an innovative scientific research program. The SRP entailed a new technology whereby the supply curve of the extant community of American economic historians shifted outward and increased its elasticity. Since the U.S. led the world in computer technology, microcomputers, software and training were available and accessible to American scholars. Both cliometricians and other social scientists developed a style of quantitative history (Jarausch, 1985). The demand side also expanded as the prosperous and leading American society found it relevant to shed light on its economic past. Not only did prospective practitioners deem profitable to invest in college education, but also they found generous grants and easy tenures in universities (Field, 1987, p. 8).

### *B. The Scientific Research Program*

Andreano's *The New Economic History: Recent papers on Methodology* (1970) summarized cliometricians' stance to study the past. The vigor with which this identity was configured was based on the debate with historians, who expressed displeasure with this emerging community. Partially, historians' uneasiness came from cliometricians' open revisionism of well-acknowledged works in American economic history. Many found these works inaccurate and sometimes misleading. Douglass North, for example, pointed out that traditional explanations were "inconsistent with elementary economic analysis" (Williamson, 1991, p.17). McCloskey (1976, p. 435) acknowledged that the American economic history previous to cliometrics was "with few brilliant exceptions, neither good economics, neither good history". In consequence, cliometricians took in charge the labor of building what they named as "scientific economic history". The terms "new economic history" and "cliometric revolution" reveal that original dispute. The disagreement was intended to be disruptive and revealed the ethos of American academic life which was deemed to be "highly conducive to scholarly controversy and new intellectual movements" (Coats, 1980, p. 195).

On cliometrics' SRP the building blocks are highlighted: *deductive analysis grounded in the neoclassical theory* and *empirical verifiability or falseability mainly grounded in statistical tests*. The economic theory would indicate explicit relationships among variables, guiding the formulation of hypotheses. Those hypotheses could be expressed as behavioral equations, in which systematic and unsystematic factors are distinguished. In turn, the proper quantification of variables enables the application of econometric tools to test hypotheses. The results from empirical verification become the final judge of an explanation. Since neoclassical theory was mathematically expressed and verifiability was a statistical construct, cliometrics increasingly included quantitative arguments. Also, mathematical symbols and concepts such as marginal price or statistical significance structured a common language among practitioners. This characteristic coined terms as "quantitative economic history" and "econometrics history". Historians' tools as narrative, rich description, overall assessments without explicit assumptions or quantifiable statements were seen as source of sloppy analyses, and, in most of the cases, non-scientific.

The hypotheses were framed by neoclassical theory making clear that cliometrics' SRP was aligned with economics' SRP. However, there was a timeframe difference: economics would concentrate on current economies while cliometrics would focus on past economies. At the hard core of economics' research program are the notions that individuals maximize, allocation is efficient in perfect markets, and the market evolves toward the equilibrium. In few words, the invisible hand. The protective belt of auxiliary hypotheses includes inefficient outcomes, in which imperfect markets explain failures, and shocks explain systemic divergences from the equilibrium. Depending on the dysfunction, the economy would deviate in the short-run from its equilibrium and return to it in the long-run, or would move to a new equilibrium.

### *C. Growth and Diffusion*

The general trends of this community of scholars can be traced out through Whaples's articles "*A Quantitative History of the Journal of Economic History and the Cliometric Revolution*" (1991), and "*The Supply and Demand in Economic History: Recent Trends in the Journal of Economic History*" (2002). Based on a classification by subject, methods and periods of published articles, Whaples facilitates a better identification of the evolution and characteristics of this approach. He notes that by 1960's research interests moved away from business history, history of economic thought and methodology toward economic growth, trade, and industrialization (1991, p. 291). Certainly, the work of Robert P. Thomas on the effects of the British Navigation Laws on the American colonies (1965), Douglass North's on the nineteenth U.S. economic growth and ocean shipping (1961, 1968), and Robert Fogel and Albert Fishlow's on the contributions of railroads to American economic growth (1964, 1965) were paradigmatic. Between 1965 and 1970, cliometric articles in this journal were popular. The insiders were mainly American scholars working on the U.S. economy. At the same time, leading universities like Yale, Harvard, Stanford, University of Chicago, and MIT hosted the most productive cliometricians. Names like Paul David, Lance Davis, Peter Temin, and Robert Fogel appeared frequently in JEH's pages. The great influence that these pioneering scholars had on the next generation indicated that diffusion came about throughout a great deal of contagion. The close relationship of students and masters stimulated many Ph.D. dissertations and future practitioners. A thriving market eager for scholars assured stable

jobs and grants. Diffusion was pushed forward once these main universities undertook the risk, thus signaling other universities which path to follow. (Field, 1987, p. 8; Williamson, 1991, p. 8).

Cliometricians' productivity was high insofar as they were able to shed a great deal of light on the American economic performance. They were equipped with the existing economic theory, new available data and novel statistical techniques to accomplish a well defined research agenda (Aerts and Van der Wee, 2001, p. 4106). Cliometricians reaped profits from the use of unexplored archival sources, and sometimes what was called ingenious reasoning based on proximate information that produced a myriad of data series. They solved problems on the measurement and explanation of the growth of income as well (Davis and Engerman, 1987, p. 99). Nonetheless, the counterfactual hypothesis' method and the debate on American slavery introduced by Fogel was a time and energy-consuming controversial piece to cliometrics. Historians deemed counterfactual analysis as meaningless and considered it ahistorical thinking. Fogel pointed out the utility of the analysis insofar it provided a lower-bound assessment for hypothetical events. Fogel and Engerman's *Time on the Cross: the Economics of the Negro Slavery* in 1974 indicated the expertise and kind of audience that cliometricians had accrued in the U.S.

By the mid 1970's, the battle against the "traditional" economic history seemed to be won and the cliometric revolution came to an end. American economists installed a well-defined set of tools and a distinctive language in the practice of economic history in the U.S. Scholars who wanted to enter to the community had to show proficient command of neoclassical theory and statistical techniques. In few words, they have to be trained as economists. Outside of the audience were traditional historians who did not master these techniques and felt antipathy for this kind of works. The truth was that cliometricians and historians had gone through many years of mutual accusations expressed with zeal and criticisms that were not always well grounded.[3]

At this point, the new economic history now was not-so-new and signals of declining productivity appeared. Not only did productivity cease growing for the debate revolved around the same controversies, but also neoclassical price theory showed its limits in providing meaningful further economic

[3] Landes (1978, pp. 4-6). While historians refer to cliometrics as a meretricious novelty, cliometricians laughed at the positive-sloped demand curves of historians.

history research. D. North acknowledged this in 1974 while Paul David and other cliometricians offered the same perspective.[4]

## III. Internal Contraction and International Diffusion: 1976-1990

By the mid 1970's the baby boom that had translated itself into more Ph.D.s stopped growing (Field 1987, p. 10). As a consequence of the 1974 recession and the Vietnam War, the U.S. government expenditures in universities fell as well as the rate of return of college education. At the same time, society's questions turned toward problems caused by economic growth. The report of the Club of Rome (1972) would set a new agenda for the international community of economic historians including environmental and gender issues, and third world countries' problems. From the 1980's onwards, the research in economic history was oriented to contemporary history, at the expense of medieval and early modern history (Aerts and Van der Wee, 2001, p. 4107). This turn to actual issues favored economists' labor whose concentration was on the working of capitalist economies, which were going through stagnation and global shocks.

Cliometrics, well-established in the U.S economics departments, was associated to a highly visible group of practitioners whose activities were seen as applied economics. The field had to accommodate to the disciplinary culture of economics and demonstrate their usefulness to the advance of economics.[5] Economics became much more a "hard" science because stylized mathematical models and statistical procedures were placed at its very core. The rational expectations approach, which took over the discipline throughout the 1970's, partly explain this trend. Simultaneously, American economic historians' activities were minimized inside economics departments (Goldin, 1995, p. 206). First, because economic historians were doing the same things as economists and second, because those that were not so orthodox received less support and emigrated to alternative places in which to further their scholarship. In economics departments, economic historians began to be seen as "intellectual curiosities" in the best cases, or as soft economists in the

[4] North (1974), David (1975). In the same line, Field (1987, p. 5) identifies this point as a "watershed marking the beginning of the end of cliometrics as an intellectual movement promising a revolution in methods and results".

[5] See Wright (1971, p. 415), North (1978a), Solow (1985), Crafts (1987b), Coclanis and Carlton (2001, p. 4).

worst. In addition, economists found more attractive other alternatives to cliometrics. Thus, the labor demand shifted downward as a result of American society's relative lesser income and interest toward this scholarship, while the labor supply moved upward, reflecting new scholars' preferences to non-cliometric activities.

After the cliometric revolution, historians were a distinct scientific community little attracted to cliometrics and therefore to economic history. This apathy was reinforced by a de-prioritization of quantitative training in history curriculums. In consequence, cliometrics' spillovers that had led historians to quantify more systematically stalled in the 1980's. A historian like Jaraush (1985) found spillovers in social history but acknowledged that quantitative historians were divided and fragmented over questions on ideology and theory. The *culturalist challenge* emerged during this period and successfully drew in students and scholars.[6] Lacking training and more oriented toward qualitative and in-depth microstudies, young historians were neither audience nor allies to cliometricians.

The true was that economics and history were pulling toward opposite directions. In a broader context, the same tendency appeared in other disciplines such as sociology and political science, which began to go away from humanities and philosophy (Wallerstain, 2004). In the middle, cliometrics with its dual nature from economics and history, and inextricably compromised with economics, began to shrink. During this period, the community found a stable size, much smaller than that of the revolutionary years, and clustered in a dozen or so American universities. In the meantime, its activities outside the U.S. would spread their innovations to foreign communities.

The picture for this period shows that the demand of this pseudo-market moved downward. The supply curve would remain the same, which means that a lower amount of answers were crafted by cliometricians. Though cliometrics must make innovations during this period, these technological advances will not be visible until the next period.

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[6] Jaraush and Coclanis (2001, p. 12636). Fogel (1983, p. 39) also commented on the history curriculum in the 1980's. He refers to the "math anxiety" of history students. Cloclanis and Carlton (2001, p. 3) point out that some historians openly declare "numbers don't do it for me". Dumke (1992, p. 12) indicates the same aversion to mathematics in Austrian history students. Latin America is not an exception in this matter.

### *A. The Scientific Research Program*

In the 1970's and 1980's, the community would face interior dissension. Systematic application of neoclassical theory and quantitative methods had left cliometricians with many achievements. By introducing economic thinking in the task, they built new knowledge and proved the unbeatable usefulness of their approach. This constituted the community's basic consensus, which established the use of economic theory and quantitative methods as their distinctive features. No less true was that this methodology had also showed the limitations of this theory and pitfalls of quantitative methods. While the theory restricted the set of questions to ask and became a straightjacket for researchers, quantification and empirical testability were feasible and appropriate but in a narrow set of problems.[7]

At this point, two factions in the community can be distinguished. On one side, there were those who felt comfortable operating within the limits set by the neoclassical theory, and looked forward to applying more sophisticated techniques. This group was willing to follow the direction taken by economics in its attempts of becoming a hard science. This group will be called the "theory-driven" group. On the other side, there were those who expressed dissatisfaction with the constraints of the neoclassical framework and use of a single methodology for verification. This group, without abandoning the tools of analysis already established, sought to explore historical evidence even if it could lead them to state results contrary to the theory. They studied issues outside this theory and applied methodologies deemed proper of traditional historians. This group will be called the "problem-driven" group.

The theory-driven group kept close to economics' SRP. As McCloskey expressed it, its achievements had to do mainly with "rethinking and remeasurement around major historical issues" and its "conclusions have often been variations on the theme 'The Market, God Bless It, Works'." (1978, p. 21). The problem-driven group was much more innovative insofar as they either extended the theory or shed light on economic phenomena little examined. These cliometricians began to talk about the visible hand, which is entrepreneurs, governments, and institutions driving market forces. In their accounts, rational calculus and optimal choice were deemed as a narrow guideline partly because constrains in a specific time-space led to imperfect

[7] North (1974), (1977), and (1978a); David (1975); McCloskey (1976), (1978), (1987); Parker (1986); Field (1987).

calculations. They pointed out that events could permanently divert a system from its long-run trend (path dependence) and in that regard context heavily mattered. Under this light the golden age SRP's core seemed to crumble.

The problem-driven group went back to thick description and inductive analysis, but organized around economic models as a method, not a doctrine. Quantitative evidence was supported on qualitative assessments so as to give it reliability and historical perspective. Insofar as this group devotes its efforts in a broad variety of subjects, these economic history studies faced methodological and thematic dispersion. Douglass North stands out in this group because he proposed a SRP to the community clearly distinct from the economics' SRP. Economic history, according to him, aims "to explain the performance and structure of economies through time" (1974, p. 77); Moreover, he set out a research agenda which included theory building (1981, pp. 7-8). The economic historians who followed this agenda will be called the "institution-driven" group, although not all of them will have theoretical aspirations as North put it. Nonetheless, most will operate within the neoclassical framework as a point of departure.

These three groups indicate that the community lacked cohesion and its SRP was fuzzy. They worked at the interior of economic departments, they were economists, and however, they disagreed on the role and methods of cliometrics (Fogel, 1983, pp. 23-24).

### *B. Domestic Growth and Diffusion*

Whaples' statistics report that in the years 1971-90 scholars' interests withdrew from economic growth, country studies, colonialism, trade and methodology, toward technology, banking, labor and migration, demography, the standard of living and health and minorities and inequalities. However, agriculture, industry and slavery would continue motivating studies. The 80% of these authors were U.S. scholars, 8% Canadians and 5% British. Since business and entrepreneurial history was placed under historians' realms after the cliometric revolution (Williamson, 1991, page 22), those articles would appear instead in the *Business History Review.* Other Journals like *Explorations in Economic History*, the annual publication *Research in Economic History* as well as *Historical Methods, Journal of Social History, Journal of Interdisciplinary History, Social Science History, Journal of Family History* and *Labor History* would include articles with cliometric influences (Fogel, 1983, p. 39). Regrettably, the lack of statistics impedes to assess these spillovers.

Davis and Engerman's cliometric historiography (1986) as well as the specialized bibliography introduced by Field's book (1987) revealed the same tendencies that Whaples found. However, because of the methodological dispersion, these reviews limited themselves to enumerating recent publications, their subjects and at most, some of their main findings. As there is no intention of identifying differences in approaches, North's work is neutrally listed by Friedman and Schwartz's. Whaples' classification of "task" articles by methodologies indicates that in 1986-90 authors tend to used more varied tools and thus went beyond a restrictive definition of cliometrics than in previous years. The increase in the articles classified as applying a restrictive definition of cliometrics was 14%, while the articles classified as using two alternative broader definitions of cliometrics-like methodologies grew 31% and 28%.[8]

Throughout this period, leading universities, like Harvard, Yale, Stanford Michigan, University of Chicago, and Penn continued hosting economic historians. (Whaples, 1991; 2002). Other universities, mainly in the Midwest, sheltered tenured members of the community, keeping the field active, although at a modest scale in comparison with other economics subfields. But, the picture was not optimistic outside of these research clusters. Since the early 1980's economic history was eliminated from economics curriculums and economic historians disappeared from teaching staffs, which clearly downplayed its pertinence to the training of economists (Field, 1987, p. 15).

An organizational effort emerged in 1983 when the Cliometric society was founded. Since then, the society was successful in getting grants from the National Science Foundation to hold the Annual Cliometrics Conference whose goal was to "provide extensive discussion of new and innovative research in economic history". In Field's eyes, the Society had extremely modest goals and lacked the ambition and revolutionary spirit that was seen in the origins of cliometrics. Indeed, the revolution was gone and now something had to replace what it had destroyed, but the community's members disagreed on what exactly should replace it.

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[8] A cliometric article "should be marked by the explicit use of economic theory and measurement" (Whaples, 1991, p. 293). The first definition, the most stringent, includes articles that use tables and price theory and articles that employ regressions. The second definition relaxes the measurement condition but keeps the use of economic models. The third definition, the broadest, includes non sophisticated calculations as proof of measurement as well as the application of non-economic theories. It also comprises methodological articles.

Some members felt that the community needed to turn to historians again and avoid the tragedy of Babel (Landes, 1978). Some members were also aware that they needed that economists buy economic history (McCloskey, 1976). An attempt to build a more integrated community's image could be seen in Fogel and Elton's book, *Which Road to the Past*, in 1983. The book distilled methodological discussions held over the two previous decades among cliometricians and historians. The disagreements of historians on the use of economic theory and quantitative methods were settled down by acknowledging two roads to the past. Fogel stated that there was a scientific history, where cliometrics was placed, and there was a traditional history. In this perspective, some issues will be better addressed by one or another method —see table 1—. But even if these both roads to the past were complementary, in the end, the research agendas took different approaches, indicating that economic historians had to choose one of these separate dominions of scholarship. Fogel's message, although reconciliatory, deepened differences among historians and cliometricians and justified those trapped in scientism.[9]

Table 1. *Two Modes of Research in Economic History*

| Modes of Research | Traditional | Scientific |
|---|---|---|
| Subject Matter | Particular individuals and Events<br>Ideographic | Collectivities of People Patterns<br>Nomothetic |
| Preferred types of evidence | Testimonies<br>Literary evidence | Quantitative evidence<br>Statistics |
| Standards of Proof and verification | Critical reexamination of documents and coherence of the testimonies and evidence (legal model) | Statistical verification of the empirical-scientific model |
| Approach* | Inductive<br>"Facts" privileged<br>Personal/Individual<br>People and Institutions emphasized<br>Contextual narrative<br>Parallel stories<br>Thick descriptions sought | Deductive<br>Theory-driven<br>Impersonal/market forces stressed<br>Universalist/absolute<br>Analytical patterns<br>Parsimony prized |

*Source:* Fogel (1983, pp. 40-54). *Coclanis and Carlton (2001).

[9] Scientism refers to "the claim that science is disinterested and extra-social, that its truth claims are self-sustaining without reference to more general philosophical assertions, and that science represents the only legitimate mode of knowledge" (Wallerstein, 2004, p. 13).

Indeed, the methodological dispersion and identity stances weakened the community's status. Once the demand of cliometricians was curtailed, incubation of new members was hindered. Also, new potential practitioners lacked integral training to make high-quality economic history, deeming hazardous to reach the dual standard. Unluckily, according to Field (1984) and Rockoff (1994), there were economists that relied upon these unbalanced but officially approved training in cliometrics to publish quick-made articles with dubious quality. While the expectations of young economists doing economic history were of very limited academic returns, historians found a source of contentment and reassurance of their own methods and doubts about cliometrics in light of those sloppy works. Davis and Engerman defended the community by saying "Clio appears fat, happy, and sassy but not lazy" (1987, p. 102). The truth was that cliometrics was fat insofar as some research was on old themes with low marginal contributions. It was happy except by North (1977), Parker (1986), and Field (1987), among others. Nonetheless, it was by no means lazy because incumbents kept working and unraveling new evidence, providing insightful analysis and raising questions on substantial issues. However, that Clio was sassy clearly overshadowed the shine of its findings.

Thus, the community's productivity is hard to appreciate because the performance of dissimilar groups has to be averaged. The theory-driven group was on the edge of diminishing returns; the problem-theory group was innovative as well as its by-product, the institutions-driven group. Despite scholarly productivity appeared positive, it is weighed down by those economists who practiced cliometrics without the command of historical thinking and the caveats to tackle quantitative evidence.

### *C. International Growth and Diffusion*

Once the community of cliometricians was established, it diffused to other countries. This took place either through American scholars that conducted cliometric work on non-U.S. economic history, or through foreign students who made their Ph.D. dissertations on their own countries. The first World Congress on cliometrics was held at Northwestern University in 1985; 28 lectures were presented, 46% on non-U.S economic history. It included countries like Italy, France, Japan, Great Britain, Germany, Ireland and Canada. The Second World Congress took place in Spain in 1989. At this time, 39 lectures were given, 64% on non-U.S. economic history, including new

countries like Spain, Portugal, China, Korea, Taiwan, Brazil, and Argentina.[10] Nonetheless, the international impact of cliometrics was far from even since its spillovers were more effective in some places than in others. Two types of pseudo-markets can be distinguished in the emergence of non-U.S. cliometric communities: growing markets (Britain, Canada, Scandinavia, Australia), and shallow markets (Germany, France, Italy, Portugal, Spain, Israel, Ireland, Russia, Japan, Mexico, Brazil, Argentina and Colombia among others).

*1. Growing Markets*

Cliometrics progressively spread out in Britain, Canada, Scandinavia, and Australia as the result of an elastic demand and supply for cliometricians' work. On the demand side, the level of income as well as society's preferences found this SRP attractive. Those countries had "the advantage of a common language and intellectual traditions in economics" (Dumke, 1992, p. 11). On the supply side, there were already structured scientific communities with experience in and access to organizational and advance technologies like regular network seminars, computers and software to make quantitative research (Jarausch, 1985, p. 17). Although at different paces, in the high extreme Britain and the low Australia, cliometric influence was welcomed and emulated, thus giving room for a dynamic communication among foreign communities.

In Great Britain, American scholars like Hughes, McCloskey, Harley, Williamson, Lindert, Mokyr, and Landes among others led the diffusion (McCloskey, 1987, pp. 77-84). British scholars like Crafts, Floud and Foreman-Peck responded to the stimulus (Floud and McCloskey, 1994). The debates went around the Industrial Revolution, the entrepreneurial failure during the late 19th century, the standard of living during the industrial revolution and the demographic history (Davis and Engerman, 1987, pp. 100-101; Crafts, 1987a, pp. 37-41). In Great Britain cliometricians met regularly at the *Quantitative Economic History Workshop*, a similar discussion group at the University of London and LSE, and in research workshops at Oxford and Warwick. These communities had national publications as the *Economic History Review* and *Oxford Economic Papers* to communicate their results.

British cliometricians had found resistance from competing communities of historians and economics historians whose SRPs are defined by the new

[10] The Cliometrics Society, "Papers Presented at Cliometrics Conferences 1961-Present", http://eh.net/Clio/Conferences/papers.html (May 31st, 2007).

social history, and Marxian influences. As a consequence, exciting debates have evolved around the evolution of the standard of living, and wealth and income inequality in capitalist countries (Dumke, 1992, p. 14). Universities like LSE, Oxford, Edinburgh and Glasgow supported independent departments of economic and social history which hosted alternative approaches. Other journals like *Population Studies* and the *Journal of Historical Geography* have diffused cliometricians' findings as well. Coats (1990) analyses the criticism that the quantitative history and cliometrics have undergone in Britain, while Crafts (1991) provides an updated view of the state of the art.

Canadian cliometricians began their activities very early. In 1965, they held the *First Conference on the Application of Quantitative Methods to Canadian Economic History,* and established *the Canadian Network for Economic History*. Several universities like University of British Columbia, McGill University, Western Ontario and University of Toronto, hosted the cliometricians who published their findings in the *JEH*, and *Canadian Journal of Economics.*[11]

In Scandinavia, mainly Denmark and Sweden, the community of economic historians has incorporated the cliometric culture to a long lasting tradition in social history. In these countries, economic history departments can be found in faculties of social science as well (Dumke, 1992, p. 12). *The Danish Society for Economic and Social History* was established in 1952, as well as *The Scandinavian Society for Economic and Social History* which publishes since then *The Scandinavian Economic History Review.*[12] Odense University, Copenhagen University, Stockholm University and Stockholm School of Economics stand out as places furthering research in economic history.

In Australia since the 1960's, the University of Sidney, through its department of economic and social history along with the *Economic History Society of Australia and New Zealand*, has published the *Australian Economic History Review.*[13] Scholars at the Australian National University would publish economic history with cliometric influences (McCloskey, 1987, p. 82).

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[11] Canadian Network for Economic History's website, http://www.economichistory.ca/ (May 31st, 2007).

[12] Scandinavian Economic Review's website, http://oekonomiskhistorie.saxo.ku.dk/scandinavian_economic_review/ (May 31st, 2007).

[13] Economic history Society of Australia and New Zealand's website, http://www.uow.edu.au/commerce/econ/ehsanz/. ( May 31st , 2007).

*2. Shallow Markets*

The demand and supply for cliometric work is low and inelastic in shallow markets. These societies raised high barriers to cliometrics based on adverse ideological preferences to such a SRP made in the U.S. Also, communities in developing countries are more constrained by societies' low income to afford their scientific activities. During this period, the historical scenario is well known: The Cold War, the disenchantment with capitalism (postmodernism), the perceptions about the U.S. imperialism and non-democratic regimes (East Europe, Asia, and Latin America).

Germany, Italy and France, with long traditions in economic and social history and traditional communities of historians, kept impermeable to the work of few native economists who earned Ph.D. degrees at American universities. In Japan, Russia, East Asia, and China, cliometric incursions were pilot tests that did not develop into scientific communities. The Marxian paradigm in Germany and the Annales School in France captured in a monopolistic way the practice of economic history. The same paradigms, along with the Anglo-Saxon social history, largely influenced scholars in Latin America. An offspring –the dependency theory, would pervade the Latin American history and studies since the 1970's. Unlike growing markets, the cliometric seeds had no suitable soil to grow up either to pervade the practice of economic history or to produce fruitful hybrids. From this perspective, the problem is not so much about importing few cliometricians as Dumke (1992) or Haber (1997) argued, but about having the "pseudo-market" conditions to diffuse their contributions to domestic scientific communities.

In Latin America, some cliometric niches were established as a conscious U.S. policy to study and cooperate with its continental neighbors. Claudio Contador, Claudio Haddad, and Nathaniel Leff from the University of Chicago led the stream of Ph.D. dissertations in Brazil. John H. Coatsworth, from the University of Chicago too, pioneered in Mexico along with Stephen Haber from Stanford University. Carlos Diaz-Alejandro led studies in Argentina.

## IV. Toward disciplinary and global Integration:1991-2006

The fall of the Berlin Wall officially signaled the end of the communism —except China— and the Cold War. Capitalism emerged triumphal and the winds of political openness and trade liberalization speeded up globalization. The ex-communist republics or second world, now transitional countries, along with the third world countries, now developing countries, began a process of

institutional convergence toward market economies and democracy. These changes arouse the interest in and stimulate the demand for knowledge about these societies' characteristics, their history, and social structure as well as their links and relationships with global institutions.

Onwards, for scientific communities across disciplines and countries is much easier to exchange scholars and intellectual production. Internet, electronic databases, a virtual market of books and articles, free software and programming codes and so forth procure an environment in which provincialism is discouraged and dialogue within and across disciplines is furthered. While the existing international subject networks and organizations expanded, the new thrived. Countries like Mexico, Germany, France, Russia, Italy and Spain, where adverse ideologies kept scholars away from cliometrics, registered an increasing diffusion of it (Dumke, 1992; Komlos and Eddie, 1997; Maurer, 1999). Simultaneously, scholars in the U.S are able to relax the conservatism that previously prevented them from tackling political and social controversial issues.

The extant criticism and revisionism of the neoclassical paradigm that began in the 1970's intensified in the 1990's. The discussants pointed out epistemological problems that the discipline could hardly dodge. Economics has responded to criticisms at different paces and extents. Some subfields of inquiry have showed more permeability than others insofar as they have developed alternative concepts and approaches. Several notions have become central elements in economics models: bounded rationality, uncertainty, expectations, non-linear processes, path dependence, intergenerational relationships and life-cycle just to mention few powerful innovations. That these responses are deemed not completely satisfactory is still subject of debate.

Assessing cliometric's evolution finds its limit at this stage. The community is internally diverse and its members have crossed disciplinary boundaries, and embarked on collective research with other social scientists. Identifying a "pure" demand and supply of cliometric work becomes specious. Rather, what it is seen is a "compound" demand and supply of scholarship in an integrated pseudo-market of scientific communities. The size, market dynamic and productivity of this integrated community is something to be determined. Nonetheless, the persistence of disciplinary labels, allows us to track some of the cliometricians' activities.

In the 1990's the demand for cliometric work expanded and gained elasticity due to lower ideological barriers. The productivity increased due to

conceptual innovations from economics, a better understanding of historical analysis in a community's sector, and spillovers from demography, geography and political science. The supply expanded because preferences for analyzing historical cases have openly risen among economists. As Rockoff (1994) points out, economists have always used historical evidence to make their arguments and talk about their theories. What seems to be different now is that the approximation is acknowledged and more self-aware.

Overall, in this pseudo-market there is an expansion of cliometric-like activities. However, a main obstacle remains in this community's labor market because the pace of incubation of new members is very slow. In the U.S., only main universities like Harvard, MIT, UC-Berkely and Davis, and Stanford require an economic history course as part of the Ph.D. core program. Needless to say the situation is desolated in the rest of universities and at undergrad level.

### *A. Toward a New Scientific Research Program?*

The focus is on those who have been active in offering alternatives to the previous period's discussions. A key source of progressiveness of economics' SRP has mainly come from the "New Institutional Economics" (NIE). The main references are North's book (1991) and Eggertsson's (1990). NIE seeks to explain economic performance and its change over time, which amounts to North's view of economic history task. The NIE draws upon cliometrics, the theory of the firm, industrial organization, law and economics, as well as political scientists who employed the rational-choice approach (Eggertsson, 1990, p. xii). NIE places at the center of the analysis concepts as transaction costs and property rights, and underscores the role of organizations. Eggertsson, a Nordic scholar, set out a research agenda, in the way that North had done it one decade before. At this time the agenda was not for economic history but for "the study of societies at all levels." He compiled a large amount of heterogeneous works coming from various fields and distinguished three levels of analysis. The first level identifies property rights and organizations to establish their impact on economic outcomes. The second level seeks to explain organizations but keep exogenous the structure of property rights and underlying institutions. The third level models the origin and establishment of property rights and organizations (Eggertsson, 1990, p. xiii). Most of the work carried out so far had concentrated on the first and second level of analysis. The third level is the most challenging because it

endogenizes the fundamental social rules structuring the exchange in economic and political markets.

In the same line of reasoning, Greif finds that the study of self-enforcing institutions and non-legal factors shaping organizations over time had been less developed (1997a, pp. 82-84). Embarking on this analysis demands an alternative methodological approach: the "Historical Institutional Analysis" (HIA). Here institutions are seen as equilibria of social games, and in finding those games *inductive* microlevel historical studies go hand-in-hand with theoretical analysis. Cultural beliefs and social factors are introduced in the analysis insofar as they determine players' expectations, moves and interactions. HIA aims at shedding light on how outcomes from past games become constraints upon current games. This analysis of the micro-dynamics of economic processes substantiates much more the theory of path dependence (Greif, 1997b, p. 402).

Closely related to HIA, it is "Analytic Narratives", an approach developed by a group of social scientists (Bates *et al.*, 1998). They suggested "analytical narratives" as accounts of historical cases where strategic situations are modeled with the aid of the rational choice, game theory models and thick descriptions of events and actors. Universalism and determinism give way to specificity and uncertainty —not absolute randomness— although the narrative seeks to complement structural and macro-level analysis. By micro-studying cases and incorporating several social variables without expectations of building grand theories, they support the already claimed "historic turn" in social sciences. In this approach, the division among traditional and scientific history makes no sense. First, tools need to be combined; some would be better suited than others depending on the question. Second, social scientists need to get beyond a bogus positivism, overcome falseability as the means of verifying a scientific claim, and be self-aware of the problem of embeddedness. The ultimate goal is to further comparative analysis and coordinate the research design. The dilemmas nomothetic vs. ideographic, inductive vs. deductive vanish, leaving the challenge of developing a cohesive methodology that allows scholars to obtain increasing returns in their academic productivity.

### *B. Domestic Growth and Diffusion*

Cliometricians' interests veered toward business cycles and depressions, public finance, law and institutions, trade, labor and immigration, the standard of living and health, and political issues (Whaples, 2002, p. 524). Subjects like

economic growth, industrialization, money, banking and credit, business, and demography maintained a stable participation in the scholarship published in the JEH, while studies on transportation, technology, agriculture and land and slavery declined. The JEH registered an increase from 20% to 32% in the participation of non-U.S scholars as well as growth in women's research, which went from 15% to 20% on average (Whaples, 2002, p. 525).

Due to the lack of a recent cliometric historiography, only the most visible publications are mentioned. Also, a sense of the community's activities is developed from the cliometrics conferences, which have been annually held since 1990 as a session of the Allied Social Science Association (ASSA).[14] Four broad areas of interests are distinguished: technology, labor and health, money and capital markets, and political economy and institutional change. In the first group, it is found Mokyr (1990), Rosenberg (2000), Temin (1991), Lamoreaux *et al.* (1999), and Guinnane *et al.* (2004). The scholarship in labor markets and issues related to the health and life expectancy has been growing fields of inquiry. Goldin's book (1990) on labor market and gender outstands. On life-cycle and demography and economic growth see Guinnane *et al.* (2004). Monetary regimes and policies have been examined by Eichengreen (1992, 1996), Bordo and Eichengreen (1993), and Bordo *et al*. (1998). Also, the globalization and financial crises raised the interests in banking regulation and the international monetary system.

On theoretical institutional analysis, Greif (1997a, 1997c) discussed the relationship between economic history, game theory and micro-theory in the study of economic institutions, while Acemoglu and Robinson (2006) consolidated a decade of research on institutions, economic growth and political regimes, and David (1994, 2001) furthered his analysis about path dependence. Also, Goldin and Libecap (1994), and Glaeser and Goldin (2006) compiled works on regulation and political economy issues in the U.S., whereas Greif's book (2006) put forward the research on self-enforcing institutions by building theory and analyzing a case of medieval long-distance trade.

Since the 1990's, the cliometric conferences included more women scholars, and examined subjects in which the individual is rescued from the anonymity of the aggregate. Thus, black people, female workers, tropical populations, peasants, immigrants, entrepreneurs, innovators, policymakers,

[14] The Cliometric Society, "Clio Conferences and Sessions", http://eh.net/Clio/Conferences/index.htm (May 31st, 2007).

criminals, unemployed people, and politicians began to have a face and rationality historically determined. Moreover, the conferences reveal that the methodological dispersion continues as well as the broad spectrum in which economic theory and quantitative methods are employed. It is possible to find a paper titled "*Market Integration and Transport Costs in France 1825-1990: A Threshold Error Correction Approach to the Law of one price*" (1998) as well as another titled "*From Servants to Secretaries: African-American Women in the U.S. Labor Market, 1940-1980*" (2000).[15] Clearly, the self-image of the community is fuzzy, which gives room for misreading its current activities. Misconceptions on what cliometricians are doing prevail thereby entrenching external antipathy for the entire body of their scholarship.[16]

The Nobel Prize awarded to Douglas North and Robert Fogel in 1993 reinforced the image the community had in its golden age. North's and Fogel's works published in the 1960's and 1970's stand out, while their recent contributions received less attention (Williamson, 1993; Goldin, 1995). The Royal Swedish Academy of Sciences would say "Cliometrics is *the branch of economics* that applies economic theory and quantitative methods to the study of economic and institutional change" (Williamson, 1993, p. v). While the theory-driven group would be pleased with this definition, the problem-driven and institution-driven groups certainly would not be comfortable. The old controversies around slavery's profitability, Fogel's counterfactual analysis and North's initial view of institutions as epiphenomena of relative prices were brought to life once more. This motivated outdated criticisms as Schabas' (1995) but also rather pessimistic assessments as Lamoreaux's (1998). Meanwhile, Goldin, a second generation cliometrician, stated that "economic history is not a maiden of economics but *a distinct field of scholarship*" (1995, pp. 191-193). When the 40 years of cliometrics came, North, as in 1977, pointed out that new economic historians continue attempting to ape economists and remained constrained by neoclassical theory's confines. As a result, economic historians were far from a more interesting economic history (1997, p. 413).

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[15] Persson and Ejrnaes (1998); Sundstrom (2000). http://eh.net/Clio/Conferences/papers.html (May 31st, 2007).

[16] Multiple definitions of cliometrics illustrate the smoking screen that surrounds this community. See Rutherford (*Dictionary of Economics,* 1992), Pearce (The MIT Dictionary of Modern Economics, 1992), Kuper *et al.* (*The Social Science Encyclopedia,* 1996, pp. 96-98), Smelser *et al.*, (*International Encyclopedia of the Social Sciences & Behavioral Sciences*, 2001, pp. 4102-4108), Calhoun (*Dictionary of Social Sciences*, 2002).

### *C. International Growth and Diffusion*

The Cliometric Society, with 380 members world wide in 1991, would join a broader network of economic historians during this period (Williamson, 1991, p. 24). In the same year, the *European Economic Historical Society* is founded (Dumke, 1992, pp. 3-4). While new associations of economic historians were established in Uruguay (1992), Brazil (1993), Mexico (1998), France (2001) and Spain (2002), the extant organizations acquired more visibility. Informatics innovations eased exchange among scholars thus giving life to the website http://eh.net/ in 1994. But soon the website expanded to provide "a wide range of internet-based services to economic historians, historians of economics, economists, historians, related social scientists and the public". The website has the support of organizations such as the *Economic History Association*, the *Business History Conference*, the *Cliometric Society*, the *Economic History Society* (UK), the *History of Economics Society*, *Wake Forest University* and *Miami University*.

The Third World Congress of Cliometrics, held in Munich, Germany in 1997 showed off this openness. There, 46 conferences took place, 74% studied non-U.S economic history, and collaborative efforts of scholars with different nationalities were registered. Countries like India, Ceylon, Indonesia, Belgium, China, Peru, Egypt, Finland, Austria and Hungary widened the list of experiences under examination. The fourth World Congress in Montreal, Canada in 2000 showed 44 lectures, 55% in non-U.S. economic history, whose time-period focused on nineteenth and twentieth century.[17] Greater globalization in economic historians' scholarship occurred in the fifth World Congress of Cliometrics, in Venice, Italy in 2004. It included 57 lectures, 40% on European economic history and 32% on U.S. subjects. The time spectrum covered late medieval ages until the upper edge of the twenty first century. New countries enlarged the list: Greece, Colombia, Korea, Taiwan, and Iran. The Cliometrics society declared around 500 members in 2006.[18]

In Growing markets as Britain, economic history has been enriched as much as by cliometrics as controversies with economic and social historians

[17] The Cliometric Society, "Third World Congress of Cliometrics, July 10-13, 1997 Munich, Germany", http://eh.net/Clio/Conferences/munich.shtml, "World Congress of Cliometrics, Montreal 2000", http://eh.net/Clio/Conferences/WCC/papers.htm ( May 31st , 2007).

[18] The Cliometric Society's website, http://eh.net/Clio/index-About.html ( May 31st , 2007).

influenced by other intellectual traditions. Floud and McCloskey (1994) gather these contributions while Crafts (1997) provides an examination, mainly grounded on British scholarship, about the potential benefits of a closer interaction between theories of endogenous economic growth and economic history. A current assessment of cliometrics' advances in Canada, Scandinavia and Australia is needed to complete the picture.

Shallow markets have gained depth during this period. Evaluating these cliometric incursions still claims for a broader context so as to consider the impact on the research and teaching of economic history. That they become growing markets is still an open question. Some recent historiographies of cliometrics can be mentioned here; Germany: Komlos and Scott (1997) and Tilly (2001); France: Grantham (1997); Mexico: Ibarra (1998) and Maurer (1999); Mexico and Brazil: Haber (1997); Latin America: Haber (2000), and Colombia: Meisel (2005).

## Conclusions

Cliometrics emerged after the World War II in the U.S. as a practice of economic history in which neoclassical theory and quantitative methods were applied to shed light on the U.S. economic past. American economists crafted this approach when the U.S. academia was expanding and economics was structuring itself as a hard discipline. Cliometrics or the New Economic History was prolific in providing valuable works and methodological discussions on what was called the "traditional" and "scientific approach to economic history. This gold age of cliometrics taught economic historians that good economic history needs scholars well informed of economic theory and able to build and evaluate quantitative information. Naturally, it taught about these tools' dangers and traps as well. In the mid 1970's, cliometrics developed internal divisions between those who felt comfortable seeing the field as applied economics and those who claimed for a distinct identity and research program. During the period 1976-1990, the community's production was dispersed, ranging from a scholarship mainly influenced by neoclassical theory and quantitative methods to studies on institutions highly permeated by traditional historical methods and other social sciences. It was a time of internal dispersion, unsettled methodological issues and less visibility in comparison with the establishment period. However, this approach managed to diffuse its achievements to other countries like U.K., Canada, Australia and Scandinavia. Less success was showed in other European and Latin American countries.

The 1990's indicated a historical momentum in which social sciences are challenged and meaningful historical knowledge is demanded. The cliometric community spread its members as well as spillovers on other scientific communities. Some cliometricians started collaborating with other social scientists as geographers, political scientists, and social historians to craft better answers. New proposals emerged like the New Economic Institutionalism, Analytic Narratives and Historical Institutional Analysis, which drew upon second and third generation cliometricians' inquiries and criticisms. These proposals, at different extents, aim at overcoming false dilemmas on scientific vs. traditional methods, or in Wallerstain's words science vs. humanities and philosophy, a division installed in the structures of knowledge in social sciences. This is a trend still in development toward social sciences' integration in which the approach to history has been crucial simply because all social research is historic.

History is a dynamic laboratory of past experiments that were carried out in an uncontrolled and decentralized way, under conditions that in most cases will no longer exist. The labor of social scientists is to shed light on how such experiments took place and how they relate to each other. Both abstract analysis and empirical evidence are essential means to disentangle the past. This is the way cliometricians have preferred. However, only could these abstractions be meaningful by developing awareness of what means to come into this complex laboratory as constrained observers endowed with human made tools. In few words, historical thinking is needed. Some scholars have identified these commands as the "dual standard" of economic history by referring to what economics and history as disciplines have traditionally demanded.

In a first step toward an integrated pseudo-market of knowledge, one would expect cliometric-like findings that undergo intellectual arbitrage of historians and other social scientists. Only by this means could economic historians' productivity reach their potential level and avoid keeping it at acceptable levels like it is currently happening. Undoubtedly, economic historians will gain depth by developing a less dogmatic, more updated and comprehensive view of what cliometrics has brought in the field. Positive effects will be seen in research's quality and higher integration among scholars.

The reformulation of a research program and institutional structure of the scholarship in social sciences hinges upon the political economy among

extant scientific communities. Benefits of changing these structures are increasing insofar as this new scholarship's supply is growing and promise to be highly productive, even more in a time when societies are urgently demanding answers to existing problems. Yet, scholars need a common language —a progressive SRP's core—, as well as a defined set of rules for operating into such an integrated pseudo-market of scientific communities.

## References


Aerts, Erik and Van Der Wee, Herman (2001). "Economic History", in Smelser, Neil J. and Baltes, Paul B. (Eds.). *International Encyclopedia of the Social Sciences & Behavioral Sciences*, pp. 4102-4108, Elsevier, Amsterdam and New York.

Acemoglu, Daron and Robinson, James A. (2006). *Economic Origins of Dictatorship and Democracy,* Cambridge University Press, Cambridge and New York.

Andreano, Ralph (1970). *The New Economic History: Recent Papers on Methodology,* Wiley, New York.

Bates, Robert H.; Greif, Avner; Levi, Margaret; Rosenthal, Jean-Laurent and Weingast, Barry (1998). *Analytic Narratives,* Princeton University Press, Princeton.

Blaug, Mark (1986). *Economic History and the History of Economics,* New York University Press, New York.

Bordo, Michael D. and Eichengreen, Barry (1993). *A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform*. University of Chicago Press, Chicago.

Bordo, Michael D.; Goldin, Claudia and White, Eugene (1998). *The Defining Moment: the Great Depression and the American Economy in the Twentieth Century*, University of Chicago Press, Chicago.

Canadian Network For Economic History's Website, http://www.economichistory.ca/ (May 31st, 2007).

Calhoun, Craig (Ed.) (2002). *Dictionary of the Social Sciences,* Oxford University Press, New York.

Cliometrics Society. "Papers Presented at Cliometrics Conferences 1961-Present", http://eh.net/Clio/Conferences/papers.html (May 31st, 2007).

_____. "Clio Conferences and Sessions", http://eh.net/Clio/Conferences/index.htm (May 31st, 2007).

_____. "Third World Congress of Cliometrics, July 10-13, 1997 Munich, Germany", http://eh.net/Clio/Conferences/munich.shtml, (May 31st, 2007).

_____."World Congress of Cliometrics, Montreal 2000", http://eh.net/Clio/Conferences/WCC/papers.htm. (May 31st, 2007).

Coats, Alfred William (1980). "The Historical Context of the 'New' Economic History", *Journal of European Economic History,* Vol. 9, No. 1, pp. 185-207.

_____ (1990). "Disciplinary Self-Examination, Departments, and Research Traditions in Economic History: The Anglo-American Story", *Scandinavian Economic History Review*, Vol. 38, No. 1, pp. 3-18.

CRAFTS, Nicholas (1987a). "Economic History", in NEWMAN, Peter, EATWELL, John and MILGATE, Murray (Eds.), *The New Palgrave: a Dictionary of Economics*, Vol. 2, Macmillan Press Ltd., London.

_____ (1987b). "Cliometrics, 1971-1986: A Survey", *Journal of Applied Econometrics*, Vol. 2, No. 2, pp. 171-192.

_____ (1991). "The New Economic History and the Industrial Revolution", in GREENAWAY, David (Ed.), *Companion to Contemporary Economic Thought*, Routledge, London and New York.

_____ (1997). "Endogenous Growth: Lessons for and from Economic History", in KREPS, David M. and WALLIS, Kenneth F. (Eds.), *Advances in Economics and Econometrics: Theory and Applications: Seventh World Congress,* Cambridge University Press, Cambridge and New York.

COCLANIS, Peter and CARLTON, David (2001). "The Crisis in Economic History", *Challenge,* Vol. 44, No. 6, pp. 93-103.

DAVID, Paul (1975). *Technical Choice, Innovation and Economic Growth*, Cambridge University Press, London.

_____ (1994). "Why Are Institutions the 'Carriers' of History. Path Dependence and the Evolution of Conventions, Organizations, and Institutions", *Structural Change and Economic Dynamics,* Vol. 5, No. 2, pp. 205-20.

_____ (2001). "Path Dependence, Its Critics, and the Quest for 'Historical Economics'", in GARROUSTE, Pierre and IOANNIDES, Stavros (Eds.), *Evolution and Path Dependence in Economic Ideas: Past and Present,* Edward Elgar, Cheltenham, UK; Northampton, MA.

DAVIS, Lance E. and ENGERMAN, Stanley (1987). "Cliometrics: The State of the Science (Or Is It Art or Perhaps, Witchcraft?)", *Historical Methods*, Vol. 20, No. 3, pp. 97-106.

DUMKE, Rolf H. (1992). "The Future of Cliometric History: A European View" in *Scandinavian Economic History Review,* Vol. 40, No. 3, pp. 3-28.

ECONOMIC HISTORY SOCIETY OF AUSTRALIA AND NEW ZEALAND'S WEBSITE, http://www.uow.edu.au/commerce/econ/ehsanz/ (May 31st, 2007).

EICHENGREEN, Barry (1992). *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*, Oxford University Press, New York.

_____ (1996). *Globalizing Capital: a History of the International Monetary System*, Princeton University Press, Princeton.

ENGERMAN, Stanley L. (1996). "Economic History". In KUPER, Adam and KUPER, Jessica (Eds.), *The Social Science Encyclopedia*, second edition, pp.220-223, Routledge, London and New York.

EGGERTSSON, Thrainn (1990). *Economic Behavior and Institutions,* Cambridge University Press, Cambridge and New York.

FIELD, Alexander (Ed.) (1987). *The Future of Economic History*, Kluwer-Nijhoff Pub., Boston; Kluwer Academic Publishers, Norwell.

FISHLOW, Albert (1965). *American Railroads and the Transformation of the Ante-bellum Economy*, Harvard University Press, Cambridge.

FLOUD, Roderick and MCCLOSKEY, Donald (1994). *The Economic History of Britain since 1700,* Cambridge University Press (1981), Cambridge and New York.

FOGEL, Robert (1964). *Railroads and American Economic Growth: Essays in Econometric History*, Johns Hopkins University Press, Baltimore.

_____ (1983). "Scientific history and traditional history", in FOGEL, Robert and ELTON, G.R., *Which Road to the Past*, Yale University Press, New Heaven.

FOGEL, Robert and ENGERMAN, S. (1974). *Time on the Cross: The Economics of the American Negro Slavery*, Little, Brown and Co., New York.

GLAESER, Edward L. and GOLDIN, Claudia (Eds.) (2006). *Corruption and Reform: Lessons from America's Economic History*, University of Chicago Press, Chicago.

GOLDIN, Claudia (1990). *Understanding the Gender Gap: an Economic History of American Women*, Oxford University Press, New York.

_____ (1995). "Cliometrics and the Nobel", *Journal of Economic Perspectives,* Vol. 9, No. 2, pp. 191-208.

GOLDIN, Claudia and LIBECAP, Gary D. (Eds.) (1994). *The Regulated Economy: a Historical Approach to Political Economy*, University of Chicago Press, Chicago.

GRANTHAM, George (1997). "The French Cliometric Revolution: A Survey of Cliometric Contributions to French Economic History", *European Review of Economic History* Vol. 1, No. 3, pp. 353-405.

GREIF, Avner (1997a). "Microtheory and Recent Developments in the Study of Economic Institutions through Economic History" In KREPS, David M. and WALLIS, Kenneth F. (Eds.), *Advances in Economics and Econometrics: Theory and Applications: Seventh World Congress,* Cambridge University Press, Cambridge and New York.

_____ (1997b). "Cliometrics after 40 Years", *The American Economic Review*, Vol. 87, No. 2, pp. 400-403.

_____ (1997c). "Economic History and Game Theory", In AUMANN, Robert J. and HART, Sergiu (Eds.), *Handbook of Game Theory*, Vol. 3, Noth-Holland, Amsterdam.

_____ (2006). *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade,* Cambridge University Press, Cambridge.

GUINNANE, Timothy W.; SUNDSTROM, William A. and WHATLEY, Warren C. (Eds.) (2004). *History Matters: Essays on Economic Growth, Technology, and Demographic Change,* Stanford University Press, Stanford.

HABER, Stephen (Ed.) (1997). *How Latin America Fell Behind: Essays on the Economic Histories of Brazil and Mexico, 1800-1914*, Stanford University Press, Stanford.

_____ (2000). *Political Institutions and Economic Growth in Latin America: Essays in Policy, History, and Political Economy,* Hoover Institution Press, Stanford.

HODGSON, Geoffrey (2001). *How Economics Forgot History: The Problem of Historical Specificity in Social Sciences,* Routledge, London and New York.

IBARRA, Antonio (1998). "Historia cuantitativa, serial y cliometría: una apreciación general y de su impacto en la historiografía mexicanista reciente" *Investigación Económica*, Vol. 58, No. 224, pp. 119-35.

JARAUSH, Konrad (1985). "(Inter)national Styles of Quantitative History", *Historical Methods*, Vol. 18, No. 1, pp. 13-19.

JARAUSCH, Konrad H. and COCLANIS, Peter A. (2001). "Quantification in History" In SMELSER, Neil J. and BALTES, Paul B. (Eds.), *International Encyclopedia of the Social Sciences & Behavioral Sciences*, pp. 12634-12638, Elsevier, Amsterdam and New York.

KOMLOS, John and SCOTT, Eddie (1997). *Selected Cliometric Studies on German Economic History*, Steiner, Stuttgart.

KUHN, Thomas S. (1970). *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago.

KUPER, Adam and KUPER, Jessica (Eds.) (1996). *The Social Science Encyclopedia,* Routledge, London and New York.

LAMOREAUX, Naomi R. (1998). "Economic History and the Cliometric Revolution" In MOLHO, Anthony and WOOD, Gordon S. (Eds.), *Imagined Histories: American Historians Interpret the Past,* Princeton University Press, Princeton.

LAMOREAUX, Naomi R.; RAFF, Daniel M.G. and TEMIN, Peter (Eds.) (1999). *Learning by Doing in Markets, Firms, and Countries*, University of Chicago Press, Chicago.

LANDES, David (1978). "On Avoiding Babel", *Journal of Economic History*, Vol. 38, No. 1, pp. 3-12.

MAURER, Noel (1999). "Progress without Order: Mexican Economic History in the 1990s" *Revista de Historia Económica*, Special Issue, Vol. 17, pp. 13-36.

MCCLOSKEY, Donald (1976). "Does the Past Have Useful Economics?" *Journal of Economic Literature,* Vol. 14, No. 2, pp. 434-461.

_____ (1978). "The Achievements of the Cliometrics School", *Journal of Economic History*, Vol. 38, No. 1, pp. 13-28.

_____ (1987). *Econometric History,* Macmillan Education, Basingstoke.

MEISEL, Adolfo (2005). "Los estudios sobre historia económica de Colombia a partir de 1990: principales temáticas y aportes", *Cuadernos de Historia Económica y Empresarial,* Banco de la República, Cartagena.

MIROWSKY, Phillip (1989). *More Heat than Light: Economics as Social Physics, Physics as Nature's Economics,* Cambridge University Press, Cambridge and New York.

MOKYR, Joel (1990). *The Lever of Riches: Technological Creativity and Economic Progress*, Oxford University Press, New York.

NORTH, Douglass C. (1961). *The Economic Growth of the United States, 1970-1860*, Prentice Hall, New York.

_____ (1968). "Sources of Productivity Change in Ocean Shipping, 1600-1850", *Journal of Political Economy*, Vol. 76, No. 5, pp. 953-970.

_____ (1974). "Beyond the New Economic History", *Journal of Economic History*, Vol. 34, No. 1, pp. 1-7.

_____ (1977). "The New Economic History after twenty Years", *American Behavioral Scientist*, Vol. 21, No. 2, pp. 187-200.

_____ (1978a). "Structure and Performance: The Task of Economic History", *Journal of Economic Literature,* Vol. 16, No. 3, pp. 963-978.

_____ (1981). *Structure and Change in Economic History,* Norton, New York.

_____ (1991). *Institutions, Institutional Change, and Economic Performance,* Cambridge University Press, Cambridge and New York.

_____ (1997). "Cliometrics 40 years later", *The American Economic Review*, Vol. 87, No. 2, pp. 412-414.

_____ (2005). *Understanding the Process of Economic Change,* Princeton University Press, Princeton.

PARKER, William (Ed.) (1986). *Economic History and the Modern Economist*, B. Blackwell, Oxford and New York.

PEARCE, David W. (Ed.) (1992). *The MIT Dictionary of Economics*, MIT Press, Cambridge.

PERSSON, Gunnar and EJRNAES, Mette (2000). "Market Integration and Transport Costs in France 1825-1900: A Threshold Error Correction Approach to the Law of One Price". http://eh.net/Clio/Conferences/papers.html (May 31st, 2007).

ROCKOFF, Hugh (1994). "History and Economics" in MONKKONEN, Eric H. (ed.), *Engaging the Past*, Duke University Press, Durham.

ROSENBERG, Nathan (2000). *Schumpeter and the Endogeneity of Technology: Some American perspectives*, Routledge, London and New York.

RUTHERFORD, Donald (Ed.) (1992). *Dictionary of Economics*, Routledge, London and New York.

SCANDINAVIAN ECONOMIC REVIEW'S WEBSITE. http://oekonomiskhistorie.saxo.ku.dk/scandinavian_economic_review/ (May 31st , 2007).

SCHABAS, Margaret (1995). "Parmenides and the Cliometricians" in LITTLE, Daniel (ed.), *On the Reliability of Economic Models: Essays in the Philosophy of Economics,* Kluwer Academic Publishers, Boston.

SMELSER, Neil J. and BALTES, Paul B. (Eds.) (2001). *International Encyclopedia of the Social Sciences & Behavioral Sciences,* Elsevier, Amsterdam and New York.

SOLOW, Robert (1985). "Economics and Economic History", *American Economic Review*, Vol. 75, No. 2, pp. 328-331.

SUNDSTROM, William (2000). "From Servants to Secretaries: African-American Women in the U.S. Labor Market, 1940-1980". http://eh.net/Clio/Conferences/papers.html (May 31st, 2007).

TEMIN, Peter (1991). *Inside the Business Enterprise: Historical Perspectives on the Use of Information*, University of Chicago Press, Chicago.

TILLY, Richard (2001). "German Economic History and Cliometrics: A Selective Survey of Recent Tendencies", *European Review of Economic History,* Vol. 5, No. 2, pp. 151-87.

THOMAS, Robert (1965). "A Quantitative Approach to the Study of the Effects of British Imperial Policy on Colonial Welfare: Some Preliminary Findings", *Journal of Economic History*, Vol. 25, No.4, pp. 615-38.

WALLERSTEIN, Immanuel (2004). *The Uncertainties of Knowledge,* Temple University Press, Philadelphia.

WHAPLES, Robert (1991). "A Quantitative History of the Journal of Economic History and the Cliometric Revolution", *Journal of Economic History,* Vol. 55, No. 1, pp. 139-154.

_____ (2002). "The Supply and Demand of Economic History: Recent Trends in the Journal of Economic History", *Journal of Economic History,* Vol. 62, No. 2, pp. 524-532.

WILLIAMSON, Samuel (1991). "The History of Cliometrics" in MOKYR, Joel (Ed.), *The Vital One: Essays in Honor of Jonathan R. T. Hughes*, JAI Press, Greenwich and London, Research in Economic History, supplement 6, pp. 15-31.

_____ (1993). *Two Pioneers of Cliometrics: Robert W. Fogel and Douglass C. North*, Cliometric Society.

WRIGHT, Gavin (1971). "Econometric Studies of History" in INTRILIGATOR, M.D. (ed.), *Frontiers of Quantitative Economics*, North-Holland Pub. Co., Amsterdam.