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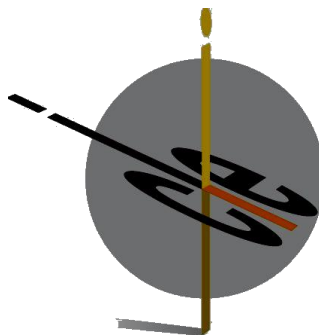
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Cliometrics: a market account of a scientific community (1957-2005)

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CLIOMETRICS:
A MARKET ACCOUNT OF A SCIENTIFIC COMMUNITY (1957-2005)
(Preliminary version, May 2006)

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Abstract

This paper aims at understanding the evolution of cliometrics by showing how this approach to study the economic past has emerged, diffused, evolved, and still continues doing so. I use an analogy from economics which is to consider cliometrics as firm, managed by a scientific community whose goal is to provide explanations of a set of questions that society asks. A pseudo-market of knowledge will help to identify more systematically the constraints and forces shaping these scientists' work. Section two develops this analogy while section three applies it to the first stage of cliometrics (1957-1975). Section four continues the analysis for the years of internal contraction and international expansion (1976-1990), and so does section five with regard to the recent evolution (1991-2006). The paper concludes with a general assessment of the cliometrics community, in which the lack of cohesion outstands. Ultimately, the failure in accomplishing the "dual standard" of economics and history finds its roots in the current structure of social sciences. Some insights on the work of integrated scientific communities are developed as well as future perspectives for scholars and economic historians in developing countries.

Key Words: Cliometrics, Economic History, Econometric History, Quantitative Economic History, New Economic History, Scientific Community, Scientific Research Program, Intellectual Arbitrage.

JEL Classification: N01

Resumen

Este ensayo apunta a comprender la evolución de la cliometría, un enfoque para el estudio del pasado económico, exponiendo su conformación, difusión y constante desarrollo. Uso una analogía tomada de la economía para analizar la cliometría como una firma, la cual es dirigida por una comunidad científica cuyo objetivo es proporcionar explicaciones a un conjunto de preguntas que la sociedad formula. Un pseudo-mercado de conocimiento permitirá identificar más sistemáticamente las restricciones y las fuerzas que determinan el trabajo de estos científicos. La sección dos desarrolla tal analogía en tanto la sección tres la aplica a la primera etapa de la cliometría (1957). La sección cuatro continúa el análisis de los años de contracción interna y expansión internacional (1976-1990); así mismo la sección cinco presenta la evolución reciente (1991-2006). El ensayo concluye con una evaluación general de la comunidad de cliometristas, en la cual la ausencia de cohesión se destaca. En el fondo, la falla para cumplir con el "doble estándar" de la economía y la historia encuentra sus raíces en la estructura actual de las ciencias sociales. Algunas observaciones sobre el trabajo de comunidades científicas integradas son presentadas así como futuras perspectivas para los académicos e historiadores económicos en los países en desarrollo.

Palabras claves: Cliometría, Historia Económica, Historia Econometrica, Historia Económica Cuantitativa, Nueva Historia Económica, Comunidad Científica, Programa de Investigación Científica, Arbitraje Intelectual.

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"Study the historian before you begin to study the facts"

(E.H. Carr, What is history?, 1961)

I. Introduction

Economic history is a field of study at the evident intersection of two disciplines, history and economics. It is precisely because of this juncture that delineating its boundaries and to setting out its methodology and object is a difficult, and sometimes, thorny task. Most scholars would agree in pointing out Adam Smith and its *Wealth of the Nations* as the starting point of the field. Smith's inquiry about the nature and the causes of the wealth of nations can be seen as the fundamental question of economics and economic history, although for the latter, the reference to the past is part of its distinctive identity. This is a simplistic way to establish hallmarks and by no means a complete definition.

The modern evolution 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. Later on, in the earlier part of the 20th century, scholars in the U.S. came into the field (Kadish 1989; Engerman 1996b, 220-2). 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. After the Second World War, a substantial change took place in the field led by American economists with the emergence of cliometrics. Thus, 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 to this approach at different times and with diverse 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, diffused, evolved, and still continues doing so. By shedding light on this evolution, the extant and coming generations of economic historians will be better equipped to discern the valuable achievements from the old battles as

well as the lessons from the artificial dilemmas. I believe that cliometrics have brought powerful tools to enrich the scholarship in economic history. However, such tools need to be reinterpreted under a new light more appropriate to the development of social scientists' comprehension. To tackle this task I find it useful to use an analogy from economics which is to consider cliometrics as a collective enterprise, an organization, or a firm, managed by a scientific community whose goal is to provide explanations of a set of questions that society asks. A pseudo-market of knowledge will help to identify more systematically the constraints and forces shaping these scientists' work. Several caveats must be done in using this analogy and will warn about the limits of using this conceptualization. However, the analogy seems appropriate because it captures the dynamics stemming from the structure of social sciences set out in the nineteenth century, that is to say, through disciplinary divisions sanctioned by modern universities. It also captures the way in which scholars and their societies respond to the resource allocation problem of creating knowledge in the presence of limited resources and alternative uses. In the twentieth century, unlike previous times, market forces indisputably regulate human and non-human capital investment. The academia does not escape to this fact. In particular U.S. academia seems to be pervaded by market-like mechanisms of competition (Coats, 1980).

What follows is a picture of the evolution of Cliometrics based on the analogy of a scientific enterprise. Accounts of the insiders, that is, American cliometricians and economists, but also of some historians and other non-American scholars will provide the foundations of this task. The picture is not a historiography of the field, although it refers to the main works and trends in the published works previously identified by other authors. The next section develops the analogy of a pseudo-market for scientific communities. Section three applies the previous section's framework to the first stage of cliometrics considered the golden Age (1957-1975) and provides the information that supports such a picture. Section four continues the analysis for the years of internal contraction and international expansion (1976-1990). Section five offers an appraisal of the recent evolution (1991-2006). The paper concludes with a general appraisal of cliometrics, some insights on the work of integrated scientific communities in social sciences, and future perspectives for scholars and economic historians in developing countries.

II. A Pseudo-market for scientific communities²

In this pseudo-market of knowledge there are two forces, demand and supply. Different factors drive every side as will be explained, but, in general, individuals articulating these forces

² Whaples (2002) suggests the idea of a supply and demand of Economic history although he does not develop it. Other authors as Field (1987) and Dumke(1992) use concepts from the price theory to analyze market forces that economic historians' community must deal with.

are goal seekers and are constrained in their activities. Here, there is no claim of maximizing behavior in the sense that microeconomics states. Instead, there is a claim of rational actors insofar as they have patent interests and pursue the best way to accomplish them. Coordination among supply and demand takes place through complex mechanisms entailing the institutional structure of both society and the scientific community. These mechanisms are historically determined: time and place are crucial. 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 must be able to assess its accomplishments and failures –again whatever its criteria. For the sake of simplicity, assume this complex process could be summarized through a measure named “social price”, which would be attached to a quantity of new knowledge. As part of the analogy of this pseudo-market, the notion of social price is convenient; however, it is by no means an explanation, or even a justification, about how a society could put a price on a piece of knowledge.

Now, let us examine the structure of such a pseudo-market. The demand is represented by a specific society, which poses a set of questions to be answered by scholars. In this light, society is the principal and scientists are the agents. A society has preferences given by its history, ideology, and social structure. These elements determine the kind of questions to ask. A society derives welfare from the answers as long as they are applied to 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 demand curve assumed here 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 the spatial exploration, where a high social price goes with an increase in the demand. As usual in microeconomics, shifts in the demand curve are due to shifts in society’s preferences and level of income. Displacements obey to changes in the social price, keeping the other factors constant. The notion of elasticity is useful as well because it will indicate society’s responsiveness to new knowledge. A High (low) elasticity would set the stage to thriving (sickly) scientific communities.

The supply is structured 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 society³. Depending on the organizational characteristics, these communities could be less or more structured and visible. The distinctive characteristic of a community is its scientific research program, which would correspond to the community's 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, 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 entailed a state of technology. The technology includes organizational (associations, journals and the like) and material (infrastructure, software, laboratories and so on) means used by the community.

Overall, the key input is human capital because this input will produce both the pieces of knowledge and the 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 and clearly competition exists for this resource among communities. The labor supply of intellectual labor follows an individual calculus of profits and losses, although it could be driven as well by an epidemic effect whereby the adoption of a SRP spreads through contagion in a prone context⁴. In this light, 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 (Wallerstain 2004, Ch.1). In a very broad base, the cost that potential members face, provided compatible preferences, is the investment in human capital. The benefits refer to the scope of the scientific achievements –a progressive SRP– 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 through which labor demand for and supply of scholars is coordinated.

³ 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 relevant and promissory the community's activities. These are the existential requirements all communities must fulfill. However, once the community has grown and specialized, society partially losses its ability to judge communities' accomplishments. Thus, the society has to rely on the competition among communities. The agency risk could be necessary to the advance of science because important queries not posed by society could be pursued autonomously. Nonetheless, the agency risk could be dangerous if societies are interested in question related to massive destruction or racial extermination.

⁴ Dumke (1992) uses the conceptual framework for adopting innovations to the diffusion of cliometrics in Europe.

The cooptation of well-trained scholars as well as the access to resources would hinge on the community's productivity. The higher the productivity, the stronger and wider the community becomes. The success mainly depends on the theoretical progression of the SRP. A research program is theoretically progressive if it explains more real phenomena and "predicts novel, hitherto unexpected facts" (Blaug 1986, 239). When this does not occur, the SRP is degenerating and the "scientific productivity" stops growing. The quality of the explanations and the intellectual framework this community provides are partially guaranteed by the rules of the scientific exercise, where the arguments are the subject of refutation and need to be coherent and grounded in well-established evidence –intellectual arbitrage. Competition with other scientific communities could sustain the quality of scientific reasoning. All these elements guarantee that a community's productivity is observable although there may be several criteria to measure it. Since a SRP may exhibit knowledge spillovers, the way in which the scientific community responds to these effects critically decides on the progressives of the program. 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 appraisal⁵. Only a lack of response of a scientific community interrupts scientific advances and may lead to the strengthening of a competing SRP. Moreover, it may turn out in a Kuhnian scientific revolution.

As usual, the supply side 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 prices. The elasticity on this supply side points out the scientific community's capacities to answer the questions of the society. Ultimately, the elasticity shows the SRP's productivity and therefore its progressiveness. A higher elasticity would indicate a progressive SRP and/or a technological advantage for the scientific community. A lower elasticity would point to a sluggish productivity and/or an inappropriate technology.

Although the growth of a scientific community depends heavily on its productivity, the community may entrench through institutions and thus guarantee its continuity. These institutions provide a degree of isolation to the community. In addition, potential barriers to the entrance may raise the costs for prospective practitioners. However, if the interest of the community is to expand, conscious diffusion efforts will be undertaken. The process of diffusion is usually described as a logistic s-shaped curve that starts with zero percent adaptors and, whether

⁵ Blaug (1986, 238). That the returns to scale be constant, increasing or decreasing would hinge on this progressiveness.

completely successful, it would end with 100 percent⁶. Darwin's ideas on evolution are an illustration of successful diffusion in biology. In this pseudo-market for scientific communities, it is evident that over time demand drives supply and vice versa. There is feedback although every side is driven by distinctive forces as well. Costs and benefits that practitioners and society derive are the result of the SRP's internal evolution as well as society's assessment of it. These are framed in a specific historical context. Institutions organizing scientific communities and ideologies come to mind as initial constraints for the diffusion of a SRP.

III. The Golden Age: 1957-1975

The Establishment

Coats (1980) provides an enlightening article on the historical context of the genesis of cliometrics or new economic history. To begin with, 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. 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, E. and H. Van der Wee 2001, 4105).

The project was inscribed into the transformation of economics as a discipline in the U.S. during the late 1930s and 1940s. The project emphasized the adoption of more sophisticated mathematical techniques such as linear programming, operation research, and input-output analysis (Coats 1980, 198). Soon in graduate programs economic theory began to crowd out institutional economics, traditional economic history and language requirements (Williamson 1991, 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 the academia as well, where the demand and supply for college education greatly increased, setting out a burgeoning scenario for academic work (Field 1987, 7-10). Therein lies the world leadership that American academic economics has reached ever since (Coats 1980, 1990).

⁶ Dumke (1992, 5).

Cliometrics was borne 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 was coined during a conference of the American Economic History Association in 1957 (Williamson 1991, 23). Three years later, the first annual cliometrics meeting was held and the cliometrician production would soon dominate the pages of the *Journal of Economic History* and *Explorations in Economic History*. From the 1960's onwards the American Economic History Association would be controlled by these newcomers (Goldin 1991, 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, 7; Williamson 1991, p. 23).

Unlike in Britain, where economic history was a separate discipline, in the pre-1950s U.S., economic historians could be found either in history or economic departments (Engerman 1996b, 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, 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 cliometricians to be "viscerally conservative" (Hogson, 2001, Ch. 9; Coats 1980, 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 the American economic growth in the 19th and 20th centuries.

In terms of this pseudo-market, cliometricians were 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 the universities (Field 1987, 8). Figures one and two in the appendix show these movements from point A to B in the pseudo-market for economic history knowledge and the scholars' labor market.

The Scientific Research Program

During the 1960's cliometricians defined their SRP. Several articles and discussions on methodology configured their guidelines. The book published in 1970 by Ralph Andreano, *The New Economic History: Recent papers on Methodology* summarized cliometricians' position to study the past. The vigor with which this identity was configured was based on the debate with historians, who expressed dissatisfaction with this emerging community. The initial uneasiness of historians came from cliometricians' open revisionism of well-acknowledged works in American economic history. Many found these works inaccurate and sometimes misleading. North, for example, pointed out that traditional explanations were "inconsistent with elementary economic analysis" (Williamson 1991, 17). McCloskey (1976, 435) acknowledged that the American economic history previous to cliometrics' emergence 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 a "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, 195).

There is a large amount of literature on the cliometric research program during this period. I highlight here the building blocks: *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 in the form of behavioral equations, in which systematic and unsystematic factors are distinguished. In turn, the proper quantification of the variables enables the application of econometric tools to test the hypotheses. The results from empirical verification become the final judge of the success of the explanation. Since neoclassical theory was mathematically expressed and verifiability was a statistical construct, the practice of Cliometrics increasingly incorporated quantitative arguments. The use of mathematical symbols and concepts such as marginal price or statistical significance structured a common language among practitioners. This characteristic created 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, which departs from the calculus that self-interested individuals make in order to maximize their utilities under the constraint of scarce resources and alternative allocations. The market, the only institution considered, would work everywhere, every time and without friction so as to harmonize individual decisions through the

price system. It was clear that cliometrics' SRP was perfectly aligned with economics' SRP. The difference was given by the timeframe: 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 the presence of perfect markets, and that the market evolves toward the equilibrium. In few words, the invisible hand. The protective belt of auxiliary hypotheses includes the inefficient outcomes, in which imperfect markets explain the 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.

Growth and Diffusion

The general trends of this community of scholars can be traced out through Robert Whaples's articles "*A Quantitative History of the Journal of Economic History and the Cliometric Revolution*" published in 1991 and "*The Supply and Demand in Economic History: Recent Trends in the Journal of Economic History*" published in 2002. Based on a classification by subject, methods and periods of the published articles, Whaples facilitates a better identification of the evolution and characteristics of this movement. 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, 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, the 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 the pages of the JEH. The influence that these pioneering scholars had on the next generation indicates that the 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 as well. Diffusion was pushed forward once these main universities undertook the risk thus signaling other universities which path to follow. (Field 1987, 8; Williamson 1991, 8).

Cliometricians' productivity was high insofar as they were able to shed a great deal of light on the American economic performance. They were armed with the existing economic theory, new available data and novel statistical techniques. The research agenda covered the

economic reconstruction after the recession war, the impact of the labor and migration on American Growth at the end of the nineteenth century, money markets and banking systems, the American Industrial Revolution, the Great Depression of the 1880's, the World Crisis of the 1930's, and the role of the residual factor in American productivity (Aerts and Van der Wee 2001, 4106). Cliometricians also 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, 99).

The counterfactual hypothesis introduced by Fogel was a time and energy-consuming controversial piece to cliometrics. It tries "to measure the significance of an event by pretending it never happened and asking how the world would have been different" (Williamson 1991, 25). 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. Ultimately, the controversy reflected that for cliometricians, theory instead of history was the master of research (Williamson 1991, 20).

North and Thomas's *The Rise of the Western World* in 1973 and Fogel's *Time on the Cross: The Economics of the negro slavery* in 1974 indicate the expertise and the kind of audience that cliometricians have accrued in the U.S. By the mid 1970's the battle against the "traditional" economic history had been won and the 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 the neoclassical framework and the statistical techniques. In few words, they have to be trained as economists. Consequently, outside of the intended audience were the 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 and criticisms that were not always well grounded and expressed with zeal⁷.

At this point, the new economic history now was not-so-new, the Revolution was declared dead and signals of declining productivity in this local market appeared. One of the revolutionary crafters, J.R.T Hughes, left a day earlier in the symposium on the *Time on the Cross* because he felt that he could do something else more stimulating⁸. Not only did the productivity cease growing for the debate revolved around the same controversies, but also the core of the SRP, the neoclassical price theory, showed its limits in providing meaningful further economic

⁷ Landes (1978, 4-6). While historians refer to cliometrics as a meretricious novelty, cliometricians laughed at the positive-sloped demand curves of historians.

⁸ Davis and Engerman (1987, 99).

history research. North acknowledged this in 1974 while Paul David and other cliometricians offered the same perspective⁹.

IV. Internal Contraction and International Diffusion: 1976-1990

By the mid 1970's the baby boom that had translated itself into more Ph.D.s in economics and history reached its maximum level of enrollment growth (Field 1987, 10). As a consequence of the recession in 1974-75 and the Vietnam War, the U.S. government expenditures in universities fell as well as the rate of return of college education. In the American universities was no longer a thriving environment, as the resources for funding academic projects were scarcer. At the same time, societies' questions turned toward problems caused by economic growth. The report of the Club the Rome (1972) would set a new agenda for the international community of economic historians including environmental and gender, and well as 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 history¹⁰. This turn to actual issues favored economists' labor whose concentration was on the working of capitalist economies, which at the time were going through stagnation and global shocks, and were revising the Keynesian policy paradigm.

Cliometrics, well-established in the U.S economic departments, was associated to a highly visible group of practitioners whose activities were seen as applied economics (Wright 1971, 415; North 1978a; Solow 1986; Crafts 1987b). It followed that the field had to accommodate to the disciplinary culture of economics and demonstrate their usefulness to the advance of economics (Coclanis and Carlton 2001, 4). Economics became much more a "hard" science, since stylized mathematical models and statistical procedures were placed at the very core of the discipline. The rational expectations approach, which took over the discipline throughout the 1970's as well as the fast expansion of powerful computational resources and quantitative methodologies partly explain this trend. Simultaneously, the activities of the American economic historians were minimized in the economic departments (Goldin 1995, 206). First, because economic historians were doing the same things as economist and second, because those that were not doing received less propaganda but sought alternative spaces to further their

⁹ North (1974), David (1975). In the same line, Field (1987, 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".

¹⁰ Aerts and Van der Wee (2001, 4107).

scholarship. However, the latter began to be seen as “intellectual curiosities” in the best cases, or as soft economists in the worst. Paul David (1986a, 31-2) metaphorically referred to the economists outside economic history as “straight economists” and to the feeling those economists had when it came to history as embarrassment. Certainly, economists found attractive other alternatives to cliometrics within economics, especially because the options the labor options were abundant in both academia and the non-academic world. In terms of this community’s history, the labor demand shifted downward as a result of lesser income and interest toward this scholarship, while the labor supply shifted upward, reflecting new scholars’ preferences to non-cliometric activities. See figure three in the appendix.

After the cliometric revolution, historians were no longer the incumbents in economic history. Now outside the field, they were a distinct scientific community that nonetheless constituted a potential audience and source of practitioners for cliometrics. Economic history as a whole attracted fewer scholars and students in history departments. The disinterest was reinforced by the de-prioritization of quantitative training in history curriculums. The spillover from cliometrics that had led historians to quantify more systematically stalled in the 1980’s. Field (1987, 14) declared that the new economic history was far from revolutionizing the U.S. history departments, where narrative and the relinquishment to build theories was entrenched in their methodology. 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 as a competing approach to the quantitative history emerged during this period and successfully drew in students and scholars. The culturalist turn was grounded on “the rise of postmodernism, which deprecated the rationalism, universalism, and empiricism of historical social science”¹¹. According to this perspective, quantitative historians had oversold their method, made quantification a fetish, and did not provide substantially more insights than other historical approaches. Lacking training in economic theory and quantitative methods and more oriented toward qualitative and in-depth microstudies, young historians were neither audience nor allies to cliometricians¹².

Cliometrics after two decades of glorious activities and a glowing self-image found itself in a scenario where economics and history were pulling toward opposite directions. In a broader context, the same tendency took place in other disciplines as sociology and political science,

¹¹ Jaraush and Coclanis (2001, 12636). Fogel (1983, 39) also commented on the history curriculum in the 1980’s. He refers to the “math anxiety” of history students. Coclanis and Carlton (2001, 3) point out that some historians openly declare “numbers don’t do it for me”. Dumke (1992, 12) indicates the same aversion to mathematics in Austrian history students. Colombia is not an exception in this matter.

¹² Moreover, young historians feed their grudge toward economic history caricaturing economic theory as imperialistic and economics as “the intellectual maiden for free-market capitalist” Coclanis and Carlton (2001, 2).

which went away from humanities and philosophy (Wallerstain, 2004). In the middle, cliometrics with its dual nature, as McCloskey (1978) puts it, and inextricably compromised with economics began to shrink. During this period, the community found a stable size, much smaller than in the years of the revolution, and clustered in a dozen of American universities. The expansion of the community's activities outside the U.S. would spread their innovations to foreign communities of scholars although at irregular paces and extents.

The picture for this period shows that the demand of this pseudo-market decreased and moved downward. The supply curve would remain the same, which means that a lower amount of answers were crafted by cliometricians. Figure one and two in the appendix capture these movements from point B to C. Although cliometrics made innovations during this period, the actualization of these technological advances will be placed in the next period. Since the analysis is static, the picture I provide does not capture these cumulative effects. However, a harmless technical detail aims to convey the fact that the SRP of the community was fuzzy and not as cohesive as it was in the golden age. Therefore to make assertions about its total productivity is difficult.

The Scientific Research Program

During the 1970's and 1980's the community would face interior dissension. The systematic application of neoclassical theory and quantitative methods had left cliometricians with many satisfactions. By introducing economic thinking in the task, they built new knowledge and proved the unbeatable usefulness of their approach to shed light on the economic past. This constituted the basic consensus at the interior of the community which adopted the use of economic theory and quantitative methods as their distinctive features. No less true was that this methodology had also showed to cliometricians the limitations of this theory and the pitfalls of quantitative methods; the theory restricted the set of questions to ask and became a straightjacket for the researcher; quantification and empirical testability were feasible and appropriate but in a narrow set of problems (North 1974, 1977, 1978; David, 1975; McCloskey 1976, 1978, 1987; Parker et al. 1986, Field 1987).

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 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. For purposes of identification this group will be called the "theory-driven" group for it illustrates that neoclassical theory established their limits of enquiry and the scope of their research agenda. On the other side, there were those

who expressed dissatisfaction with the constraints of the neoclassical framework and the use of a single methodology for verification. This group, without abandoning the tools of analysis already established, sought to explore the historical evidence even if it could lead them to state results contrary to the theory. They studied issues not contemplated by the extant theory and applied methodologies deemed proper of traditional historians. This group will be called the “problem-driven” group basically because the observation of economic phenomena motivates the nature of its questions and the tools to craft its answers.

The theory-driven group kept close to the SRP of economics and as such, it was seen as applied economics. As McCloskey (1978, 21) expressed it, its achievements had to do mainly with “rethinking and remeasurement around major historical issues”. Its “conclusions have often been variations on the theme ‘The Market, God Bless It, Works’.” In McCloskey’s eyes (1978, 15) these cliometricians would be economists applying economic theory (either simple or complicated) to historical facts (always quantitative) in the interest of economics (not history). An economist specialized in industrial organization would say that this group has a problem of differentiation of product (economic history) amidst a market (economics) not segmented enough.

The problem-driven group was much more innovative insofar as they either extended the theory or shed light on economic phenomena little examined before through the study of historical episodes. These cliometricians began to talk about the visible hand, that is entrepreneurs, governments, and institutions that were driving market forces. Also they singled out the role of property rights and transaction costs. In their accounts, rational calculus and optimal choice were deemed as a narrow guideline partly because constraints in a specific time-space led to imperfect 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 core of the SRP seemed to crumble. Paul David stands out in this group because of his leadership in developing the notion of *path dependence*. He sees the economic historian’s world as “a succession of working models of applicable theories, each appropriate to a particular social, temporal and technological setting.” (1975, 14). Clearly, 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 – when pertinent – was supported on qualitative assessments so as to give it reliability and historical perspective. Once more, in McCloskey’s eyes, these cliometricians would be economists applying economic theory (either simply or complicated) to historical facts (not always quantitative) in the interest of history (not economics). Insofar as this group devotes its efforts in a broad variety of subjects and unexplored issues, it faces methodological and thematic dispersion that may be deemed as a “balkanization” of the economic history studies.

From the problem-driven group, Douglass North stands out as well because he proposed a SRP to the community clearly distinct from the SRP of economics. He defined the tasks of economic history and set out a research agenda which includes theory building. Economic history, according to him, aims “to explain the performance and structure of economies through time” (1974, 77); In doing so a “theoretical analysis of the changing rules of the game is at the very core of the subject matter of economic history” (1974, 3). He states that explaining economic performance requires a theory of demographic change, a theory of growth in the stock of knowledge (technology), and a theory of institutions. He undertakes the labor of building a theory of institutions whose goal is “fill out the gaps in the neoclassical model”. He went on by defining the building blocks of such theory of institutions:

“1. a theory of property rights that describes the individual and group incentives in the system; 2. a theory of the state, since it is the state that specifies and enforces property rights; 3. a theory of ideology that explains how different perceptions of reality affect the reaction of individuals to the changing ‘objective situation’”(1981, 7-8).

The economic historians who follow North’s agenda are named the “institution-driven” group because their work focus on identifying and explaining institutions which support economic performance based on North’s categories and language. Clearly, not all members in this group will have theoretical aspirations as North put it, but they will operate within the neoclassical framework as a point of departure and reference. To continue with McCloskey’s membership definitions, these cliometricians are economists building economic theory –or at least baking the bricks to do so– upon historical facts in the interest of social sciences. To this group the returns to scale may be increasing but the high costs and barriers entailed by the collective action of a broad community of scholars already segmented may prevent its endeavor.

The emergence of these three groups indicates that the community lacked cohesion. They worked at the interior of economic departments, they were economists, and however, they disagreed on the role and methods of cliometrics. Fogel declared:

“Although cliometricians are sometimes referred as a ‘school’, the term is somewhat misleading since cliometrics encompasses many different subjects, viewpoints, and methodologies. The common characteristic is that they apply the quantitative methods and behavioral models of the social sciences to the study of history”(1983, 23-24).

By referring to “models of social sciences” instead of “neoclassical theory” Fogel found a broad-spectrum category to shelter all members of the community.

Domestic Growth and Diffusion

Whaples' statistics (1991, 290; 2002, 524) report that in the years 1971-90 the interests of scholars who published in the *Journal of Economic History* 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. Agriculture, industry and slavery would continue calling the interests of scholars. The 80% of these authors were U.S. scholars, 8% Canadians and 5% British on average. An increase from 5% to 15% in the participation of cliometrician women was noticeable during this period (Whaples 2001, 525). Since the work on business and entrepreneurial history was placed under the domain of historians after the cliometrician 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, 39). Regrettably, the lack of statistics impedes the appraisal of these spillovers.

The brief historiography on cliometricians' work from the mid 1970's into the 1980's made by Davis and Engerman (1986) as well as the specialized bibliography introduced in the chapters of Field's book (1987) on macroeconomics, development, demography and labor pointed out the same general tendencies that Whaples found. Because of the methodological dispersion, these reviews limit themselves to enumerating the recent publications, their subjects and at most some of the main findings. As there is no intention of identifying differences in approaches, North's work is neutrally listed by Friedman and Schwartz's work. Whaples' classification of "task" articles, published in the *Journal of Economic History* (JEH), by methodologies indicates that in 1986-90 authors tend to use 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%¹³.

The main scholars leading these trends in technology were David (1975, 1986b) and Rosenberg (1976, 1982). These works pioneered the economic analysis of technological change,

¹³ A cliometric article "should be marked by the explicit use of economic theory and measurement". 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 sustains the use of economic models. The third definition, the broadest, includes non sophisticated calculations as proof of measurement as well as the application of noneconomic theories. It also comprises methodological articles. Whaples (1991, 293-4).

which is a substantial piece to the understanding of economic growth not considered by neoclassical theory. In business history and the role of government and regulation, Chandler (1977) and Hughes (1977) would highlight the visible forces shaping markets. The work of Wright (1978, 1986b), Umbeck (1977, 1981), and Libecap (1984) would focus the discussion on property rights and political economy issues. In macroeconomics, the scholarship would examine banks and financial institutions (Rockoff, 1975; White, 1983; Kindleberger, 1984), money and prices (Friedman and Schwartz, 1982; Bordo and Schwartz, 1981, 1984), and the international monetary system (Temin 1976, 1989; Eichengreen 1985, 1990). On the labor market Goldin and Sokoloff (1982) would initiate a fruitful research. In demography and related topics to the standard of living the work of Lindert (1978), Gallman (1980), Fogel (1984), Goldin (1981), and David (1986b) extended the research in this area. On institutions, North (1981) advanced his project on a theory on institutions and later on published a historical article to illustrate the role of institutions as the ultimate causes of economic growth (North and Weingast, 1989). On slavery, the debate would be refined with David et al. (1976), Walsh (1977), and Fogel (1989).

Throughout this period the leading universities, like Harvard, Yale, Stanford Michigan, University of Chicago, and Penn continued hosting economic historians. While MIT decreased its ranking in the field, UC-Berkley took its place (Whaples 1991, 299; 2002, 526). Other universities as University of Iowa, University of Illinois, Indiana University, Northwestern University, Miami University, University of Arizona, University of Kansas, Vanderbilt University, University of Toronto, Washington University in St. Louis, and University of Wisconsin sheltered tenure members of the community. These universities kept the field active, although at a modest scale in relation to other fields in economics. This first generation of cliometricians, relying on its tenure professors and sound scholarship, now was in the company of a second generation it had trained itself. But the picture was different out of these departments. Since the early 1980's in many universities economic history was eliminated from the curriculum and economic historians disappeared from faculties (Field 1987, 15). In economic departments economic history was no longer part of the core courses, which downplayed its pertinence to the training of economists. Field declared "the academic sector as a whole is contracting, or in a slow-growth mode"(1987, 6). His somewhat optimistic estimation indicated that "economic historians have comprised less than 2 percent of economics Ph.D. output in the last decade in the U.S." (1987, 37:note 13).

An organizational effort emerged in 1983 when the Cliometric society was founded. It defined itself as "an academic organization of individuals interested in using economic theory and statistical techniques to study economic history. The Society seeks to advance and improve scholarship by emphasizing methodology, practicing, and promoting educational opportunities for

young scholars”¹⁴. Since then the society was successful in getting grants from the National Science Foundation to hold the annual Cliometrics Conference –running since 1957– 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; the revolution no longer pushed beyond the extant frontier in the application of economic theory and statistical methods to economic history (p. 5). Indeed, the revolution was gone and now something had to replace what it had destroyed. However, the members of the community disagreed on what exactly should replace it.

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 image of the community 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 decades prior to the publication among cliometricians and historians. It has a reconciliatory tone whereby gentleman’ conversations among cliometricians and historians were reestablished. The disagreements of historians before 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. The characteristics of each approach are synthesized in the table 1 in the appendix. Elton, on the history side, disagrees with Fogel’s classification and scientism in the sense that scientific history “ascribes ambitious to follow the natural sciences in methodology and in moral neutral neutrality” (Elton 1983, p.74).

Nevertheless, both scholars point out that the methods to get the evidence, either qualitative or quantitative, need to be rigorously collected. On the economics side, an important concession was made:

“Cliometricians have to acknowledge that there are issues for which traditional methods are better suited than scientific ones. Moreover, successful application of cliometric methods requires a deep and thorough knowledge of historical circumstances” (Fogel 1983, 67).

Even if 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 scholarship¹⁵. From my perspective, Fogel’s message, although reconciliatory

¹⁴ <http://eh.net/Clio/index-About.html>

¹⁵ According to Fogel, therein lies “the impatience that cliometricians and economic historians have with each others’ research agenda” (1983, 44). To Elton, these “supposedly schools of history” are a phenomenon specifically American (1983, 82).

deepened the differences among historians and cliometricians and raised more dilemmas for the economic historians trapped in scientism¹⁶.

The effort to call the solidarity of economists was made through one of sessions in the 1984 meeting of the American Economic Association at Dallas, Texas. The session was entitled “*Economic History: A Necessary though not Sufficient Condition for an Economist*” and included two theorists, Robert Solow and Kenneth Arrow, and two economic historians, Paul David and Peter Temin. They were asked to reflect on the neglected state of economic history. The papers were published in the book, *Economic History and the Modern Economist*, in 1986. The theorists sympathetic with economic historians expressed their conviction about the importance of the field. Solow declared that cliometricians were doing the same work as economists and in that regard, they dodged the task of economic history, which was to provide to the civilized economic theorist “the opportunity to observe the interplay between social institutions and economic behavior over time and place” (1985, 329). From Solow’s perspective, North’s epitaph had been carved for he had observed years before that:

“It is more comfortable (and for the young scholar far safer) to remain within the time frame of the market-dominated economy and within the conceptual confines of an elegant body of theory. However if we limit ourselves to that course of action, we shall become as extinct as the giant sloth- a mere footnote in the history of economic thought.” (North 1977, 196).

It was true North’s assertions that as long as economic historians do not develop a distinct research program, economists will not take them seriously (1978b). But not only did the opposing directions that economics and history took as disciplines aggravate the slow diffusion of cliometrics. The methodological dispersion and the differences at the interior of the community weakened in a great deal its position at economic departments. Without consensus, the community would survive in focalized clusters. The downward spiral was propagated through its labor market during the 1980’s. First, when the demand of cliometricians was curtailed, the incubation of new “cliometricians” was hindered. Consequently, the labor supply, now biased toward non-cliometric preferences, lacked the training to make high-quality economic history. Field noted that many economists were autodidacts in historical methods, which brought about an existential weakness and reproduced “the most egregious errors and the repetition of past mistakes” (1987, 33). Crafts (1991a) and Saavedra (2003) express the same concern. The dual standard that economic historians must fulfill and that McCloskey (1978, 28) judged as advantageous was deemed hazardous and was attached a high opportunity cost for mindful

¹⁶ 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, 13).

practitioners. Unluckily, associated with the theory-driven group there were cliometricians that relied upon these unbalanced, but officially approved, training to publish quick-made articles with dubious quality. It comes with no surprise that those economists were seen as unscrupulous free riders on the well-grounded scholarship of economic history. Williamson noted that under the pressures of publishing and competition, some cliometricians had “short changed the story” (1991, 26). Rockoff notes that many had written on esoteric subjects like unemployment in the disintegrating Hapsburg Empire (1994, 49).

For an external observer, the community continued giving reasons to those who revived the bad propaganda around and the sins of the first generation of cliometricians and the ongoing zeal of the theory-driven group. Indeed, while the expectations of young economists were of low academic returns, the historians found a source of contentment and reassurance of their own methods and doubts about cliometrics in light of those opportunistic works. Davis and Engerman went out to defend the community by saying “Clio appears fat, happy, and sassy but not lazy.” (1987,102). 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 et al (1986), and Field (1987), among others. Nonetheless, it was by no means lazy because cliometricians kept working and unraveling new evidence, providing insightful analysis and raising questions on substantial issues to the economic past. However, that Clio was sassy clearly overshadowed the shine of its findings. According to Davis and Engerman, “the succeeding decade has witnessed more cliometric work than the preceding one” was undeniable. What was not so clear was the relative size and impact of the new generation of cliometricians who had waited in the wings and were technically better trained (1987, 99).

Overall, the productivity of the community is hard to appreciate because the performance of dissimilar groups has to be averaged. The theory-driven, when its research was historically substantiated, was on the edge of diminishing returns –again, as North stated it (1978, 78); the problem-theory group certainly was innovative as well as the institutions-driven group, although the latter is more difficult to evaluate at this initial stage. The scholarly productivity of these two groups remains positive. However, it is weighed down by the work of those economists who practiced cliometrics without the command of historical thinking and the caveats to tackle quantitative evidence of the past.

International Growth and Diffusion

Once the community of cliometricians was established, it had the conditions to diffuse its SRP to other countries. The diffusion 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 and applied cliometrics (McCloskey, 1987; Davis and Engerman, 1987). The first World Congress on Cliometrics was held at Northwestern University in 1985, with 90 participants and 20 overseas (Williamson 1991, 24). 28 lectures were presented, 46% on non-U.S economic history whose time focus was 19th and early 20th century. It included countries like Italy, France, Japan, Great Britain, Germany, Ireland and Canada. The second world congress took place in Santander, Spain in 1989. At this time, the number of participants and the variety of subjects matters throughout time and space substantially increased. 39 lectures were given, 64% on non-U.S. economic history, including new countries like Spain, Portugal, China, Korea, Taiwan, Brazil, and Argentina. Also, medieval ages and more contemporaneous issues like the 1980's debt crisis were presented¹⁷. Another type of spillovers, even though indirect and more difficult to asses, took place once some children of the cliometric revolution joined other organizations of economic historians. This is the case of *The International Economic History Association (IEHA)*, established in 1960. This organization unites economic historians from almost 40 countries in Europe, America, Asia, and Oceania. The Cliometric Society is one of the international affiliates. The IEHA organizes every four years a World Economic History Congress¹⁸.

Looking at the whole period, the impact of cliometrics was far from even, as Whaples stated by classifying the JEH's publications. He finds that for the years 1976-1990, 79% of the articles focused on the U.S. (2001, 525). Likewise, for the period 1941-1990, 90% of the authors were U.S. scholars and 5% were British (1991, 298). Cliometrics' spillovers were more effective in some places than in others. Continuing with the analogy on the pseudo-market of scientific communities, two types of 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).

Growing Markets

Cliometrics progressively spread out in Britain, Canada, Scandinavia, and Australia as the result of both an elastic demand of and supply for cliometricians' work, which was able to expand amid these favorable environments. 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, 11). On the supply side, there were already structured scientific communities with experience in and access to organizational

¹⁷ <http://eh.net/Clio/Conferences/papers.html>

¹⁸ <http://www.iisg.nl/~neha/ieha/>

and advance material technologies like regular network seminars, computers and software to make quantitative research (Jarausch 1985, 17). Although at different paces, in the high extreme Britain and the low Australia, the influence of cliometrics was welcomed and emulated, thus giving room for a dynamic communication of these nascent communities with the U.S. community.

In Great Britain, American scholars like Hughes, McCloskey, Harley, Williamson, Lindert, Mokyr, and Landes among others led the diffusion (McCloskey 1987, 77-84). British scholars like Crafts, Floud and Foreman-Peck responded to the stimulus (Floud and McCloskey 1981). 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, 100-101; Crafts 1987a, 37-41). Subjects such as the unemployment in interwar Britain, the nature of the economic growth (the Habbakkuk debate), the construction of general equilibrium models and the population's evolution had reached quantitative sophistication (Crafts 1987b, Crafts et al. 1991a). Dumke (1992, 11) points out that "the center of cliometric research in Europe is Great Britain". There 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 not only national publications as the *Economic History Review* and *Oxford Economic Papers* but also U.S. reviews like *The Journal of Economic History* and *Explorations in Economic History* to communicate their results. For example, Whaples finds that the pages published on British economic history in the JEH went from 1.3% in 1971-1975 to 6.5% in 1986-1990 (2001, 525). As was mentioned, British cliometricians had found resistance from competing communities of historians and economics historians whose SRPs are defined by the new social history, pervaded with 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, 14). Universities like LSE, Oxford, Edinburgh and Glasgow support 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 (1991a) provides an updated view of the state of the art. Crafts highlights how cliometrics has matured and emphasizes the cliometric contributions to British economic history.

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*¹⁹. Several universities like University of British Columbia, McGill University, Western Ontario and University of Toronto, hosted the cliometricians who published their findings not only in *The Journal of Economic History* and *Explorations in Economic History*, but also in *Canadian Journal of Economics*. Thus, the published pages on Canadian economic history in the JEH increased from 3.4% in 1971-975 to 11.7% in 1976-1980, but decreased to 9.8% in 1986-1990 (Whaples 2001, 525).

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, 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*²⁰. 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*²¹. Scholars at the *Australian National University* would publish economic history with cliometric influences (McCloskey 1987, 82). Australians cliometricians found space in the pages of *Explorations in Economic History* and the *JEH* in which the highest participation in published pages was 3.6% during 1981-1985 (Whaples 2001, 525).

Shallow Markets

The demand of and supply for cliometrician work is low and inelastic in shallow markets. Western European countries are not as constrained as developing countries by the level of income to afford scientific communities' activities. However, both developed and developing countries raised high barriers to cliometricians based on adverse societies' preferences to such a SRP made in the U.S. The historical scenario is well known: The Cold War, the disenchantment with capitalism (postmodernism), the perceptions about the U.S. imperialism and the presence of non-democratic regimes (East Asia, Latin America).

¹⁹ <http://www.uoguelph.ca/~sday/cneh-rche/>

²⁰ <http://oekonomiskhistorie.saxo.ku.dk/> and <http://www.tandf.co.uk/journals/journal.asp?issn=0358-5522&subcategory=EB050000>

²¹ <http://www.uow.edu.au/commerce/seis/ehsanz/index.html>

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. Unlike the 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 Harber (1997) argued, but about having the “pseudo-market” conditions to diffuse their contributions to domestic scientific communities.

The Marxian paradigm in Germany and the Annales School in France captured in a monopolistic way the practice of economic history²². Dumke notes that the *Economic History Session* of the *German Economic Association* was co-opted by traditional economic historians who are hardly replaced by cliometricians (1992, 8). Nonetheless, some scholars like Richard Tilly at the University of Munster, and also Joerg Baten at the University of Tuebingen, have been able to establish a niche for German cliometricians (1992, 12). 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 (Harber 1997, 10). The dependency paradigm viewed Latin American underdevelopment as a product of capitalism itself and rejected neoclassical economic logic.

Not only did the dependency theory dominate the research paradigm but it also shaped the political agenda. The import substituting industrialization (ISI), a program of state economic planning, intervention and trade control, spread throughout Latin America—except Chile. Because the ISI is found in some African, East Asian countries and India, these societies’ preferences must have been formed against cliometrics as well. Also, an ineffective demand, due to the low level of income, operated as a tough constraint on the activities of scientific communities of historians and economic historians in these countries. Limited access to informational technologies, scarce funding to undertake archival classification and data base building made quantification a heroic task. Scholars in these markets confront a “larger-than-life obstacles and promising superhuman intellectual rewards since the basic numerical outlines of development still have to be sketched in” (Jaraush 1985, 16). The urgency to substantiate political programs amid scarce data, low access to informational technology and a small number of scholars trained in quantitative methods could explain somewhat why the *dependentistas* rarely tried to empirically test their hypotheses.

²² On these approaches see Cohen (1978) and Forster (1978) as well as North’s comments (1978b) at *Journal of Economic History*, 38(1).

On the supply side, overall scientific communities are feeble because of the low returns of a life in the academia, the lack of tradition and management of organizational resources, and the huge opportunity costs represented by a career in the private sector or the government. The emergence of specialized “markets” in sub-fields within disciplines has to overcome these pitfalls. In Latin America, while economists were mainly devoted to solve current problems and engaged in policymaking, most of the historians used narrative to focus on “social movements and political conflicts engendered by widespread poverty and inequality” (Harber 1997, 1).

Some cliometric niches, however, were established by U.S. scholars as a result of a conscious U.S. policy on studying and cooperating with its Latin American continental neighbors (Bejarano 1994). 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 as well, pioneered in Mexico along with Stephen Harber from Stanford University. Carlos Diaz-Alejandro introduced the economic analysis to the study of economic growth in Argentina, and to some extent Roberto Cortes-Conde followed him. In Colombia, the debut of cliometrics was made by William McGreevy of MIT with his Ph.D. dissertation in 1965, which was introduced in Spanish in 1975. McGreevy openly confessed that when he decided his thesis subject he only knew that the country produced coffee and its capital was Bogota. The experience was a misfortune for cliometrics because McGreevy, although well armed with economic theory, had a precarious knowledge of the country and relied on dubious quantitative bases (Meisel 1998, 9). The community of economic historians and historians, which included some U.S. historians, severely criticized and banned the book. The dismissal of cliometrics was sealed by a sloppy practitioner and the zeal of a scientific community unable to take apart McGreevy’s mistakes from the innovations and contributions that his approach entailed (Meisel 1998, 17).

V. Toward disciplinary and global Integration (1991-2005)

The 1990’s is an exciting time for the world. 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 revolution of informatics and communications, as well as the increasing flows of capital and people throughout countries, make the world a vast network. Humanity comes in an unprecedented era which is able to observe itself and realize the diversity of experiences of the societies on the planet. Higher interconnection makes much more explicit the risks of systemic failures and the need for transnational coordination (Yergin and Stanislaw 2002). The ex-communist republics or second world, now called transitional countries, along with the third world countries, now called 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. Crafts (1991) and North (1997) emphasize the urgency for answering fundamental contemporaneous questions.

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 lower prices of computer technology procure an environment in which provincialism is discouraged and the dialogue within and across disciplines is furthered. While the existing international subject networks and organizations expanded, the new thrived. Cliometricians welcome the political change with optimism. Countries like Mexico, Germany, France, Russia, Italy and Spain, where adverse ideologies kept scholars away from cliometrics, registered an increasing diffusion of cliometric work (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 debate's participants pointed out the epistemological problems and established a well-grounded discussion that the discipline could hardly dodge. Among the most recent outstanding works are McCloskey (1985), *The Rhetoric of economics*; Mirowsky (1989), *More Heat than Light: Economics as Social Physics, Physics as Nature's Economics*; Marchi and Blaug (1991), *Appraising Economic Theories: Studies in the Methodology of Research Programs*. Also, the sociology of the academic life of economists has been analyzed by Szostak (1999), *Econ-Art: Divorcing Art from Science in Modern Economics*; Hodgson (2001), *How economics forgot history: the problem of historical specificity in social sciences*; Nelson (2001), *Economics as Religion: from Samuelson to Chicago and Beyond*; Weintraub (2002) *How Economics Became a Mathematical Science*.

Economics has responded to the criticism 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 the models of economists: bounded rationality, uncertainty, imperfect information, expectations, strategic decisions, non-linear process, path dependence, endogenous selection of institutions, intergenerational relationships and life-cycle, and constitutional design, just to mention few powerful conceptual innovations. That these responses are deemed not completely satisfactory and are debatable does not eclipse the fact that economists seek out answers. The deconstruction and reconstruction of economics' SRP is a process that may be strengthened in the future and may be inscribed in the reformulation of social sciences (Wallerstain, 2004). The historical

conditions for this to happen deserve an analysis I will not carry out here. Instead, I will refer in a more modest scale to the scholarly rebuilding of cliometrics. Some communities of economists perceive that the historical turn that economics needs to take, its precise meaning and means, and the so-called historicity of economics, is waiting in the wings.

That perception comes from the fact that cliometricians have contributed to answer the broader set of societies' questions from 1990's on. They have done so based on cumulative work as well as new research. Once more, due to the community's diversity, the advances are evident in some subjects like labor market and gender, and indecisive in others like economic growth and economic policy. Also, the dialogue between cliometricians and economic theorists has been reestablished since cliometricians' work has been illustrated not only when the market works but also when it fails to achieve efficient outcomes and reverse departures from the equilibrium.

Assessing the evolution of the pseudo-market of cliometricians finds its limit at this stage of the account. The community is internally varied and its members cross disciplinary boundaries, and embark on collective research with other social scientists. As a result, identifying a "pure" demand for and supply of cliometricians' work becomes specious. Rather, what I see it 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.

Having said that, the persistence of disciplinary labels, nonetheless, allows us to single out cliometricians' activities. It is important to keep in mind that such labels provide a broad but an inaccurate picture of this community. Thus, the 1990's on would see that the demand curve for cliometrician work has moved outward and gained elasticity due to lessened ideological barriers. The productivity increased as well, propelled by conceptual innovations from economics, a better understanding of historical analysis in a sector of the community, and also by spillovers from demography, geography and political science. The supply curve has expanded because the 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. Likewise, Greif points out that economics and economic history are converging because economics is "accepting induction as an important route to general economic propositions" (1997c, 402). Overall, in this pseudo-market there is an expansion of cliometricians' activities. However, a main obstacle remains in its labor market since the low rate of incubation of cliometricians is still a constraint. 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

the universities and at the undergrad level. Figures one and two in the appendix capture these movements from point C to D.

Toward a new Scientific Research program?

As was seen, the core of cliometrics and therefore economics' SRP has been under constant criticism. In response, the progressiveness of economics' SRP has come from the emergence of the "New Institutional Economics" (NIE), or "Neoinstitutional Economics" to an important extent. This approach places at the center of the analysis the concepts of transaction costs and property rights, and underscores the role of organizations and institutions in economies. The goal of NIE is to explain economic performance and its change over time. This amounts to North's view of economic history task. The analysis departs from a rational choice approach not from a simplistic perspective, but rather from a dynamic and relativistic analysis. Here institutions, as the main source of incentives, change over time, thus inevitably modifying the notion of rationality. All this calls for an analysis of ideas and ideology (North, 1980; North 1990, 135).

NIE becomes a main influence influencing economists and cliometricians minds. North's book on *Institutions, Institutional change and Economic Performance* and Eggertsson's *Economic Behavior and Institutions*, both published in 1990, condensed a decade of intensive research on institutions. The NIE draws upon cliometrics, the theory of the firm, industrial organization, law and economics, and political scientists who employed the rational-choice approach or the named "modern political economy" (Eggertsson 1990, xii). 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, xiii). Most of the work carried out so far had concentrated on the first and second level of analysis. Indeed, a large amount of research on political economy has been made at the first and second level of analysis (Persson and Tabellini 2000). The third level is the most challenging because it endogenizes the fundamental social rules structuring the exchange in economic and political markets.

A third-generation cliometrician's findings coincide with Eggertsson's observation about the concentration of the research on institutions. Greif (1997b) finds that most cliometricians' work inscribed in the NIE has constrained their analysis to institutions defined and enforced by

the state. The study of self-enforcing institutions, such as the state itself, and non-legal factors shaping institutions, organizations and their evolution over time, had been less developed (p. 82-84). The tools to embark on such a scientific endeavor require an alternative methodological approach. Greif introduces such an alternative as “Historical Institutional Analysis” (HIA) to show how a broader operational concept of institutions can be built throughout context-specific strategic modeling. This approach uses game theory models to tackle historical situations where institutional innovation and selection of self-enforcing institutions take place. 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 1997c, 402).

Clearly, the study of economic performance throughout time demands a combination of abstract analysis with a historical approach. The old institutionalism breathes life into the clothes of theoretical reasoning to make sense of masses of qualitative and quantitative facts as well as their connections. The methods of traditional historians and inductive analysis appear over and over again in cliometricians’ toolbox. However, this generation of cliometricians seems to be more aware that it needs to be better methodologically equipped because understanding institutional evolution involves normative judgments so as to grasp “why the institutions are the way they are” (Persson and Tabellini 2000, 4-5). In few words, it asks for disclosing the underlying values, the mind-set of individuals and societies, entailed by institutional structures.

Social scientists face the problem of observational biases, an issue hotly debated in the philosophy of science. McCloskey (1994, 2001) has analyzed how economists could get beyond a bogus positivism, overcome falseability as the means of verifying a scientific claim, and be self-aware of the problem of embeddedness. A group of social scientists, among them a third-generation cliometrician, proposed an alternative to these pitfalls (Bates, Greif, Levi, Rosenthal and Weinwast, 1998). They suggested the path of “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 the social sciences. Nonetheless, the evaluation of an analytical narrative must follow the rule of sound research: logical reasoning and conceptual precision, historical coherence of the account, quality of the evidence, stance before competing

explanations, and degree of generality. The ultimate goal is to pave the way to further comparative analysis and coordinate the research design. Under this light, the dilemmas among nomothetic-ideographic, inductive-deductive, scientific-traditional analysis vanish, but leave the challenge of developing a cohesive methodology that allows scholars to get increasing returns in their academic productivity²³.

Growth and Diffusion

The interests of cliometricians veered toward business cycles and depressions, public finance, law and institutions, trade, labor and immigration, the standard of living and health, and political issues, according to Whaples' JEH statistics (2002, 524). Subjects like economic growth, industrialization, money, banking and credit, business, and demography maintained a stable participation in the scholarship published in this journal. Matters like transportation, technology, agriculture and land, and slavery appeared less in comparison with the period 1970-1990. The Journal registered an increase from 20% to 32% in the participation of non-U.S. scholars as well as growth in women researcher, which went from 15% to 20% on average. These trends are more visible from 1996 on. (2002, 525). Besides the journals mentioned in the previous section, there are other journals in economics that included cliometricians' articles such as *The American Economic Review*, *Quarterly Journal of Economics*, *Journal of Political Economy*, *Journal of Economic Literature*, *Journal of International Money and Finance*, *Journal of Monetary Economics*, *International Economic Review* and *Journal of Labor Economics*. In the same way in which the publications of the community opened to foreign scholars' articles, U.S. scholars have been present in the extant European Journals and have actively participated in new European-edited journals like the *Journal of Institutions and Theoretical Economics* and *Journal of Institutional Economics*. The leading economic departments in economic history according to Whaples' statistics, are Stanford, Harvard, University of Illinois, Northwestern University, and University of Chicago. Nonetheless, UC-Davis, UC- Berkely, MIT, Vanderbilt and University of Arizona, among twenty other universities support the activities of the community as well (2001, 526-7).

Because of the absence of a recent historiography of cliometrics, only the most visible publications can be referred here. However, a sense of the community's research is developed from the cliometrics conferences, which have been annually held since 1990 as a session of the Allied Social Science Association (ASSA)²⁴. It is important to keep in mind that these

²³ Nomothetic relates to involving, or dealing with abstract, general, or universal statements or laws, while ideographic refers to the representation of characteristics of a particular thing or an idea.

²⁴ <http://eh.net/Clio/Conferences/index.htm>

conferences included non-U.S. scholars as well. Four broad areas of academic production 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), David (1994, 2001), Rosenberg (2000), Temin (1991), Lamoreaux et al. (1999), and Guinnane et al (2004). In 1993 and 1994, the cliometric conference included sessions on “*Historical patterns of technological and organizational innovation*”, and “*Growth and technological change*”. In 1998 and 2004 sessions on “*The economic organization of science*” and “*Technology and industrial organization*” took place.

The scholarship in labor markets and issues related to the health and life expectancy has been growing fields of inquiry. Goldin’s book (1990), in labor market and gender, outstood. The sessions in the cliometric conference on labor market were: “historical issues in labor markets” (1992), “*Topics in American Labor history*” (1994), “*Labor and industry in historical perspective*” (1996), “*Southern labor markets*” (1997), “*Counting and laboring*” (1998), “*Slavery and race*” (2000), “*Productivity and labor markets in the first industrial revolution*” (2001), “*Profits, wages and unemployment in the U.S. economic history*” (2004), and “*Wealth and mobility in historical perspective*” and “*The economic history of labor and health*” (2006). On life-cycle and demography and economic growth see Guinnane et al (2004). The cliometric conference illustrated about antropometric history with the session “*Health and height*” (1999). Other related sessions were: “*Life, death and work: An economic history of race and labor markets in twentieth century America*” (2002), “*Death, taxes and public Spending in Economic History*” (2003), and “*The evolution of health*” (2004)

Monetary regimes and policies have been examined by Eichengreen (1992, 1996), Bordo and Eichengreen (1993), and Bordo et al. (1998). The globalization and financial crises raised the interests in banking regulation and the international monetary system. The corresponding sessions included: “*Lessons from monetary regimes*” and “*Money exchange rates and capital markets in the long run*” (1993), “*Perspectives on historical financial markets*” (1996), “*Money down the river*” (1998), “*Monetary and financial history*” (2000), “*The development of financial markets and institutions*” (2001), “*The impact of deflation*” and “*The development and origins of the federal reserve system and its impact on financial markets*” (2002), “*Money, banking and the Gold Standard*” (2003), “*Economic shocks and cycles in the past*” (2006).

On theoretical institutional analysis, North (2005) headed the list. Greif (1997a, 1997b) discussed the relationship between economic history, game theory and micro-theory in the study of economic institutions, while Acemoglu and Robinson (2006) distilled 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) resumed a decade of intensive research on self-enforcing institutions in a case of medieval long-distance trade. The cliometric conferences discussed on “*Property rights, contracts and institutions*” (1992), “*Understanding collective action and outcomes*” (1994), “*Political economy of institutions*” (1996), and “*Growth and institutions*” (1998). However, the scholarship on institutions will be more extensively diffused in the international scenario in association with European scholars as will be seen.

Two positive trends can be noticed in the cliometric conferences since the 1990’s. First, they included more women scholars, and second they 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, criminals, unemployed people, and politicians began to have a face and rationality historically determined. The conferences also 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). To some extent due to this dispersion, the self-image of the community is fuzzy, which gives rise to misread its current activities. Moreover, outdated misconceptions on what cliometricians are doing may prevail at the interior of the community thereby entrenching antipathy for the entire body of cliometric scholarship.

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 were highlighted, while their recent contributions received less attention (Williamson 1993, Goldin 1995). Indeed, “both scholars were far from the approached for which they were honored” (Wright 2001, 4111). Furthermore, 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, v). While the theory-driven group would be pleased with this definition, the problem-driven and institution-driven groups, among them Fogel and North, certainly would not be comfortable. The old controversies around the profitability of slavery, Fogel’s counterfactual analysis and North’s initial view of institutions as epiphenomena of relative prices was brought to life once more. Untargeted criticisms as Schabas (1995) but also rather pessimistic appreciations about the cliometric community as Lamoreaux (1998) are better understood when this context along with the state of cliometricians’ art is taken into account.

Claudia Goldin, a second generation cliometrician, drew back the smokescreen posed on the community activities by declaring:

“Cliometrics is quite simply, the application of economic theory and quantitative methods to the study of history. (...). They [Fogel and North] are distinctive, because for them economic history is not a maiden of economics but *a distinct field of scholarship*. Economic history was scholarly discipline before it became cliometrics. (...) The new economic history, or cliometrics, formalized economic history in a manner similar to the injection of mathematical models and statistics to the rest of economics. (...) The birth of cliometrics brought economic history into the discipline of economics” (1995, 191-3).

On the occasion of the 40 years of cliometrics, North took up the assessment he made in 1977 about the community. There he expressed his inconformity, because most of the new economic historians were still attempting to ape economists and remained constrained by the confines of neoclassical theory. Under the light of his research agenda, economic historians were far from a more interesting economic history (1997, 413). In the same line of understanding as Goldin and North, Greif stated:

“Cliometrics emerged 40 years ago to combine economic theory and quantitative analysis for *the advance of history and economics*. As an intellectual movement, it aspired to enhance the study of past economics by subjecting them to the rigor of economic theory and quantitative analysis, while utilizing the richness of history to evaluate and stimulate economic theory and to improve our comprehension of long-run economic processes” (1997c. 400).

However, the general perception of a broad public is quite far from Greif’s and Goldin’s interpretation, insofar as one could find the following definitions in reasonable authoritative dictionaries.

“The quantitative study of history which originally was carried out in the USA with the profitability of slavery and the role of railroads as its principal subjects for research. Elaborate econometrics analysis has been applied to the study of economic growth” (Rutherford, *Dictionary of Economics*, 1992).

In the previous case, the definition is clearly outdated.

“The name for the “new economic history” which uses econometrics to study issues treated by economic historians. In a sense all econometric work is cliometrics as the data used have been generated in the past. However, in general the greater the antiquity of the data the greater the justification for the term cliometrics” (Pearce, *The MIT Dictionary of Modern Economics*, 1992).

Here, there is an unbalanced emphasis on the use of the most elaborated quantitative methods.

“The most general characteristics of cliometric work (in economic history) have been the systematic use of economic theory and its concepts to examine economic growth in the past, and the widespread preparation and formal statistical analysis of quantitative material” (Kuper et al., *The Social Science Encyclopedia*, 1996, 96-8)

This is the standard definition, given by Engerman, which is the most general and neutral.

“Alfred H. Conrad and John Meyer launched the idea of ‘New Economic History’, aiming at integrating economic theory, quantitative methods, and history into one discipline. (...) It gave birth to ‘Cliometrics’ soon a well-established subdiscipline of American Economic history” (Smelser et al., *International Encyclopedia of the Social Sciences & Behavioral Sciences*, 2001, 4102-8).

Now, the position of cliometrics is misperceived by Aerts and Van der Wee, two European economic historians.

“A set of methods that uses advanced statistical analysis and econometrics to study historical problems. It is also known as ‘New Economic history’ or ‘econometric history’. Much of the work in cliometrics has relied on counterfactual speculation – a technique familiar to economists but generally eschewed by historians. (...) Other cliometricians rely on large scale quantitative data collection and analysis- again in contrast to traditional narrative history” (Calhoun, *Dictionary of Social Sciences*, 2002).

The latter picture still emphasizes methodological dilemmas that have been worked out, although they have not been completely settle down since the golden age of cliometrics. In conclusion, there is no doubt that these inaccurate images hamper the advance of the community, introduce noise in the dialogue with other scientific communities and discourage potential practitioners.

International Growth and Diffusion

The Cliometric Society, with 380 members world wide in 1991 (Williamson 1991, 24), would join a broader network of economic historians during this period. In the same year, the European counterpart of the Cliometrics Society, the *European Economic Historical Society* is

founded (Dumke 1992, 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 visibility²⁵. The innovations in information technology procured exchange among scholars through e-mail, thus giving life to the website www.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*²⁶.

The multiplicative effects of this openness were reflected in the Third World Congress of Cliometrics, held in Munich, Germany in 1997. There, 46 conferences took place, 74% studied non-U.S economic history, and collaborative efforts of scholars of different nationalities were registered. Countries like India, Ceylon, Indonesia, Belgium, China, Peru, Egypt, Finland, Austria and Hungary enlarged the lists of experiences under examination²⁷. The fourth World Congress in Montreal, Canada in 2000 presented 44 lectures, 55% in non-U.S. economic history, whose time-period focused on 19th and 20th century²⁸. Greater globalization in the exchange of economic historians’ scholarship is manifest in the fifth World Congress of Cliometrics, in Venice, Italy in 2004. This congress was co-sponsored with the *European Historical Economics Society*, *The Economic History Society of Australia and New Zealand*, *The Canadian Network for Economic History*, and six universities (Autonoma de Barcelona, Duke, LMU Munich, Tel Aviv, Waseda (Tokyo)²⁹. It included 57 lectures, 40% on European economic history and 32% on U.S. subjects. The time spectrum included late medieval ages until the upper edge of the 21st century. New countries enlarged the list: Greece, Colombia, Korea, Taiwan, and Iran. The Cliometrics society’s website says: “so far, more than four hundred economic historians from around the world have participated as authors and discussants of landmark research papers at these World Congresses”. The society in 2006 declared to have around 500 members³⁰.

In Growing markets as Britain the field has been fruitful in reassessing subjects like the industrial revolution, the economic growth, and the standard of living. The history of Britain has been enriched as much as by cliometrics as by the controversies with economic and social historians influenced by other intellectual traditions. Floud and McCloskey (1994) continue introducing these main contributions in the British economic history. Crafts (1997) provides an

²⁵ See a lists of related organizations at <http://eh.net/websites/#PO>

²⁶ <http://eh.net/about>

²⁷ <http://eh.net/Clio/Conferences/munich.shtml>

²⁸ <http://eh.net/Clio/Conferences/WCC/papers.htm>

²⁹ <http://eh.net/Clio/WCC5/index.html>

³⁰ <http://eh.net/Clio/index-About.html>

examination, mainly grounded on British scholarship, on 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 as well as the spillovers in these settings. That they become growing markets is still an open question. Some recent historiographies of cliometrics can be mentioned here; Germany: Komlos and Eddie (1997) and Tilly (2001); France: Grantham (1997); Mexico: Ibarra (1998) and Maurer (1999); Mexico and Brazil: Harber (1997); Latin America: Harber (2000), and Colombia: Meisel (2005).

VI. Concluding Comments

Revolutions as social phenomena involve chaotic trends, which nobody can fully understand but some time after, just when the forces in conflict settle down. They are surrounded by smokescreens, more or less thick, and have echoes and counter-echoes. It has been said that they use to devour their own children. Cliometrics as a revolution in the practice of economic history is not the exception. It is evident that cliometrics has pervaded the practice of economic history in the U.S. and has given raise to prolific hybrids in other countries. Currently, the noticeable community of cliometricians is perceived as a ghetto (Lamoreaux 1998) or as a minority isolated from the rest of the big community of economic historians (Aerst and Van de Wee, 2001). Certainly, organizations are more than the sum of their parts and have an impact because they mobilize collective actions and provide quasi-public goods; they are made up of individuals that represent them, and become their visible heads or agents. The appropriateness of these agents depends on the vision that the principal has about the tasks these agents should perform. In the case of cliometrics, there is no consensus on the matter. Not only does the community lack cohesion but also it has dodged fundamental methodological issues, which undermine its practice. The failure in accomplishing the dual standard of economics and history continues hampering the dual quality of cliometricians' scholarly. Moreover, the productivity gap in cliometricians' work, that is the potential productivity with respect to the actual productivity, is huge because an important amount of cliometricians' findings have not undergone the intellectual arbitrage of historians and other social scientists.

But the relative isolation of this community that emerges from this perspective is not an issue that could be attributed exclusively to the stubbornness of economists or the indifference of

historians. The existence of two cultures in the structures of knowledge in social science prevents this arbitrage (Wallerstain, 2004). These two cultures, science vs. humanities and philosophy, have been installed in the institutional structure of the academia and the mental models of scholars since the 19th century. On the economics side, the discipline shows slow progress in abandoning its scientism –the Newtonian model– and recognizing itself as an uncertain and historical science. Sutch (1991, 227) refers to the unfulfilled third task of economic history as to integrating economic history back into the discipline of history. Furthermore, he calls for “change ourselves: our thinking and our writing styles”. Neal (2000) still makes the same plea and complains on the dominance of the “standard lab report” that journals and referees demand to articles of diverse epistemological nature. On the history side, which takes up the humanities and the philosophical perspective, the discipline exhibits low response in training historians on economic theory, other analytical tools in social sciences and quantitative techniques. Paradoxically, this happens in a time where technology has endowed scholars with powerful computational tools (Jaraush and Coclanis 2001). From this angle, historians and other social scientists too prevented with theory and quantification have the risk of drowning in nihilism, thus neglecting the social responsibilities of historical research (Hodgson 2001; Wallerstain 2004).

Economics as the rest of social sciences is historical. McCloskey (1987) says economics is a subfield of history, and Wright (1986a) expresses that to see economic history as a “happy marriage” between economics and history is naïve since the practice of theorizers and policymakers is historically conditioned. This perspective led to the term “historical economics” with which European scholars are more comfortable. History is a dynamic laboratory of past experiments. What is more, the experiments 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 economists have preferred. However, only could these abstractions be meaningful by developing a consciousness of what means to come into this complex laboratory as constrained observers – historical thinking.

The way to embark on this endeavor has been paved. Analytical and computational tools along with collaborative efforts, not from a disciplinary but a social science perspective, promise great intellectual and social welfare dividends. Equally important and challenging is to develop a common language and define a set of rules for such an integrated pseudo-market of scientific communities. This is why Wallerstain observes that the 21st century is an exciting scenario for the social sciences. This reformulation of the research program and institutional structure of the scholarship in social sciences hinges upon the political economy among extant scientific communities. However, the benefits of changing these structures are increasing insofar as

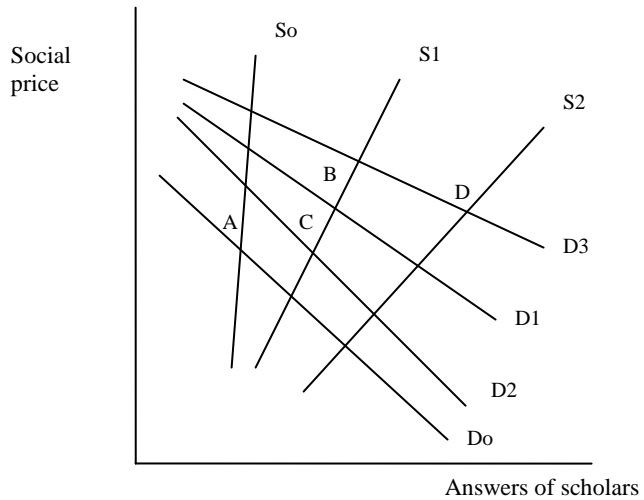
scholars are jointly working and producing relevant contributions. In few words, the supply of this scholarship is growing and promise to be highly productive. Also, societies are demanding answers to contemporary and urgent problems, related to policymaking, social engineering, economic growth and the like. These supra principals may facilitate this process, even though as Wallerstein puts it, ultimately, it depends on what happens with the world-system.

We, scholars working in shallow pseudo-markets are encouraged by this perspective. First, because the movement leads us toward a practice of a social science able to provide meaningful answers to pervasive problems like low social welfare, inequality, dysfunctional democracy, atrophied markets, violence and conflict resolution, and constitutional design among others. The elasticity of the demand for this scholarship may increase and procure better and higher allocation of resources for funding scholars' activities. This in turn could make possible the redesign and establishment of institutional structures that support the research, teaching and exchange within and among domestic and international communities. Optimistically thinking, it could help to overcome the personality-centric scholarship style characterized by instability, short-run impact, individual biases and small scale –however, as usual there have been exceptions. Second, because the movement throws away the universalism that denied the importance of the context and the specificity of a case, local research and scholars recover their importance. They are vital to interpret a particular problem simply because they are insiders. Accurate interpretations determine the suitability of scientific answers and their derived policies. For example, it is true that some provincialism was around the *dependentistas'* plea for a different theory for Latin America. However, their rejections of too abstract statements reflected the neglect of contextual issues, important to make sense of them.

Finally, going back to the existing disciplinary structure and to the present possibilities, we economic historians working in shallow markets could gain depth by developing a less dogmatic, more updated and comprehensive view of cliometrics. This has a double positive effect: first in the quality of our research, and second, in the stimulus it offers to students and non-economist scholars who feel beckoned by the field, had much to contributed but need to be equipped with economic analysis' tools. Such potential practitioners are urgently wanted, especially because in shallow markets there is still a huge masse of factual evidence to dig and analyze. This project asks for resources, looks out for opportunities to grow and demands a trans-generational scope. Eventually, it would allow us to stop working all the time in solitude, either at our offices, though equipped with powerful computers, or at the archives, though endowed with fascinating documents.

APPENDIX

Figure 1
Pseudo-market of the U.S. cliometric community

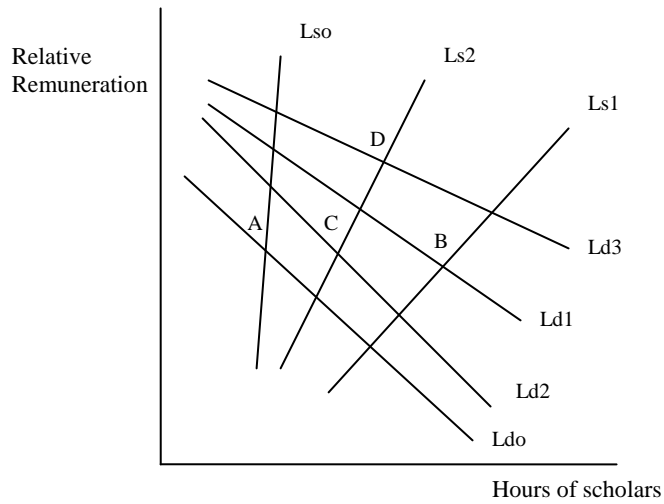


From A to B: The supply and demand move outward and gain elasticity.

From B to C: The supply does not change and the demand moves inward and loses elasticity.

From C to D: the supply and demand move outward and gain elasticity.

Figure 2
Labor Market of U.S. cliometricians



From A to B: The labor supply and demand move outward and gain elasticity.
 From B to C: The labor supply and demand move inward and lose elasticity.
 From C to D: The labor supply does not change and the labor demand moves outward and gains elasticity.

Table 1

Two modes of Investigation in Economic History

<i>Modes of Investigation</i>	<i>Traditional</i>	<i>Scientific</i>
Subject Matter	Particular individuals and events	Collectivities of People. Patterns
Preferred types of evidence	Ideographic Testimonies Literary evidence	Nomothetic Quantitative evidence 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 “Facts” privileged Personal/Individual People and Institutions emphasized Contextual narrative Parallel stories Thick descriptions sought	Deductive Theory-driven Impersonal/market forces stressed universalist/absolute Analytical patterns Parsimony prized

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

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