The Vital Tools: How Economic History Complements and Completes the Training of an Economist

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Abstract

At the 1964 AEA meetings in a session on the current state of economic history, several papers were delivered on the role of economic history in the education of an economist. In 1981 an AEA session was devoted to the broader question of what content should be included in the economics major. Another generation of economists has been trained since then, and it is time once again to consider the role of economic history within the economics discipline. This time we are specifically interested in asking the question: what role (if any) does economic history play in the training of graduate students? Does it deserve a place in the curriculum? What does it deliver in terms of skills to young scholars? We address this issue in order to get a handle on how our focus on training graduate students has changed and where it should focus for the future.

"I do not approve of Economic History courses quite unaccompanied by any Economic Theory." 1

Introduction

Economic historians have contributed to the development of economics in many ways, combining theory with quantitative methods, constructing and revising databases, and discovering and creating entirely new ones. This has made it possible to question and reassess earlier findings, thus increasing our knowledge, refining earlier conclusions, and correcting mistakes. In addition, this field has added greatly to our understanding of economic growth and development, affording the economic historian the valuable element of time as a variable, which the traditional theorist does not enjoy. The use of history to examine economic theory has deepened our knowledge and understanding within fundamental areas of research as to how, why, and when economic change occurs. It is perhaps in this area where the greatest contributions of economic historians have appeared.

We look at the current role of economic history in the graduate curriculum with a brief summary of its evolution and changing emphasis in the curriculum. In regard to the former, we survey the core curriculum and the role of economic history courses in graduate programs in the United States. In regard to the latter, we focus on the evolution of economic history from its German school beginnings through the Cliometric revolution and how that translated into its perceived pedagogical value.

What should an economist know? In an effort to determine what it is we academic economists believe they should master, we look at 50 of the top ranked economics Ph.D. programs in the United States to see how they train their students. Admittedly, the students at the top 50 programs only make up a tiny percentage of the total number of academic economists, but they make up a much larger percentage of the economists who train the next generation of economists. So it is worth looking at what they believe are the vital tools for all future economists to master.

What is economic history?

Economic history is a subset of history. Both economists and historians are trying to tell plausible stories about the past, and they succeed or fail by narrative standards to connect one event to another. The new economic history (cliometric) movement in the late 1950s transformed the study of economic history from a narrative to a mathematical format. In the process, economic historians have contributed to the development of both economics and history by combining theory with quantitative methods, constructing and revising databases, and adding the variable of time to traditional economic theories. This has made it possible to question and reassess earlier findings, thus expanding the frontier of our knowledge of the past and its ability to portend the future. The use of history as a crucible to examine economic theory has deepened our knowledge of how, why and when economic growth and development occurs.

As long ago as 1893 Sir William Ashley, who occupied the world's first chair designated for economic history, made a case for the inclusion of economic history in the curriculum. He

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¹ Sir William Ashley 1927

eloquently argued that the mere gratification of natural curiosity, of a desire to know about our past, what created it, and what led us to our present, was motivation enough to study it. If for no other reason, economic history was needed to "widen [the] sympathies [of its students], enlarge [their] conceptions of the possible, and save [them] from the Philistinism of the market-place. . . . and finally, there may be some who will be drawn to this field of inquiry by a hope . . that they may thereby arrive at a more satisfying and intelligible conception of the evolution of human society."²

Rondo Cameron argued that because the fundamental role of the economic historian is to describe, analyze and explain change, "any theory of structural change must, in order to command respect, be tested against historical or long-term data. The symbiosis of history, theory, and policy in application to problems of economic development is therefore a natural consequence." And in the 1960s Hugh Aitken and Robert Gallman emphasized this link while making the case for economic history in the curriculum. "Economic historians have to be concerned with variables that the theorist normally excludes from his system. . . . Economic history . . . requires a theory of economic development." Economic history has a definite role to play in the education of all economists. "It will play this role best if it speaks explicitly of economic development." The fundamental role of an economic historian "

Richard Tawney identified the role of economic history by focusing more broadly on the role of historians as chroniclers of social behavior under a variety of conditions and environments with the object of identifying the characteristics of different types of civilization in order to "discover the forces in which change has found its dynamic, and to criticize the doctrines accepted in each epoch as self-evident truths." The purpose of economic history, indeed all history, is "ultimately to widen the range of observations from the experience of a single generation or society to that of mankind." John Nef (1944) argued that economic history was an inexhaustible subject, tasked with providing a framework for the collection and presentation of mass quantities of information of all kinds and values.

At one time, when Purdue was at the center of the new economic history, it required a graduate course sequence in economic history because it was the empirical part of economics. The skills taught in the economic history courses were designed to "provide the student with a basic knowledge of economic institutions and their evolution . . . [and] emphasize the impact of these institutions on economic processes." And since "all empirical work is by its very definition economic history, the [courses] introduce the student to the techniques of empirical testing of economic hypotheses. In particular it introduces the student to the sources of economic data and, in connection with the course in research methodology, the formulation of hypotheses in forms that are subject to test." On a different note, bemoaning the frequent misuse of history, Rondo

² Ashley 1893 p 134-35

³ Cameron 1965 p 114

⁴ Aitken 1960 p 91

⁵ Gallman 1965 p 109-11

⁶ Tawney 1933 p 11

⁷ Tawney 1933 p 11

⁸ Cameron 1965 p 113

Cameron (1965) cited a more basic role for economic history as the watchdog to assure that it is used properly.

The evolution of the economic history discipline

Economic history emerged as a distinct discipline during the course of the revolt against the deductive theories of classical economics, led by the likes of Gustav Schmoller in Germany and Sir John Clapham in England. The original aim of the historical school was to replace what they believed to be the unrealistic theories of deductive (the gathering of facts leading to a certain conclusion) economics with theories developed inductively (the development of theories providing evidence of the truth) through the study of history. They held that history was the key source of knowledge about humans and human organizations, and because it was culture and time specific, it could not be generalized over time or space, hence general theories were useless. Their view was that economics was best approached from the vantage point of empirical and historical analysis, not abstract theory and deduction.

Before economic history there were political economics departments and history departments, and neither was a natural home for economic history. Political economics departments tended not to focus on history. And the general approach by scholars trained in history departments in the 19th century was to consider economic factors as only one cause of change, and not always necessarily the most important one.

Economic history set its first serious footings in 1895 when the London School of Economics opened its doors. It was founded in opposition to the tenets of orthodox economics. As a result, economic history was an important presence from the beginning. In 1901 it became the first British university to offer a degree in economics, and economic history became a possible specialty. The first teachers of the subject were W. A. S. Hewins, the inaugural director, and William Cunningham, author of the first English language textbook on economic history, published in 1882.

At the dawn of the 20th century it appeared that the attempt of the historical school to replace deductive theory with inductive reasoning had failed. In fact, the economics discipline was moving toward a more deductive approach. The movement to turn economics into a science, which grew out of the rising stature of the natural sciences, gave way to a new understanding that for economics to take its place at the pinnacle of the social sciences, it needed to formalize and rely more on mathematical models.

Economic history in America

Harvard was the incubator of economic history in the US. Charles Dunbar, founder of the Harvard economics department, along with his colleagues Frank Taussig, and J. Lawrence Laughlin, who later would found the University of Chicago economics department, offered courses in a variety of US economic history topics beginning in 1883. In 1892 Dunbar and Taussig were responsible for the hiring of William J. Ashley to the first chair of economic history in the world.

Ashley was strongly influenced by German scholarship, as was his Harvard successor, Edwin F. Gay. Gay imparted the standards and techniques of the German academy – the methodological principle of sticking to the facts, of telling history as it really was - on his colleagues and students. He used a multidisciplinary approach and taught his students that hypotheses had to

reflect several approaches, including social, political, international, and psychological, as well as economic.

In the first decades of the 20th century economic history spread across departments, if not in influence within the discipline. Chairs in economic history were created at many leading institutions, but the discipline had difficulty gaining traction due to the lack of a dedicated journal or society to promote its research. Contributing to the problem was the growing fascination with the scientific method and its potential applications to economics, exemplified by the theoretical approach espoused by Marshall in the UK and soundly rejected by economic historians. In the US this manifested itself in the growth of economic forecasting, which eventually led to the creation of the *National Bureau of Economic Research* (NBER).

During his service to the U.S. government during WWI, Edwin Gay became convinced of the need for better economic statistics. He and Wesley Mitchell headed the Central Bureau of Planning and Statistics, responsible for the gathering and reporting of statistical data. Together they helped found the NBER to stimulate the collection and interpretation of historical statistics.

Mitchell served as research director at the NBER for its first quarter century. He gathered tremendous amounts of empirical economic data in order to draw inductive generalizations from it, combining his historical approach to understanding cycles, which he saw as a global phenomenon, with an urgent call for more data collection from around the world. The NBER was central to this data collection effort and served as a sort of haven for statistical economists. The mission of the NBER was to gather empirical information about the American economy in order to create a robust foundation for theoretical generalizations.

After WWI this expansion and increased proficiency in the use of statistical materials took attention, students, and resources away from economic history. Enrollment in economic history courses held steady since major universities required a semester of it in their graduate programs, but writing it as a field declined.

The NBER ultimately served as a catalyst for the change in emphasis from narrative to quantitative studies in economic history. Mitchell, Simon Kuznets, Arthur Burns, Solomon Fabricant, and Harold Barger produced a series of quantitative descriptions of American economic growth while at the NBER that measured growth as far back as the 1870s.

By 1941 Gay felt that the work of the historical economists had not been able to displace the "theoretical school," but did modify it. By then the use of the deductive method had become more guarded and the practitioners of this "dark art" had increased the range and depth of their contemporary observations, and their viewpoint had expanded to become less individualistic and more social. In conclusion, he called for the reunification of economic history and theory, noting that the economic historians knew a great deal about the long trends of productive energies and social pressures leading to economic growth, which could be combined with the tools of the theorist to lend greater insight into the growth process. Far from incompatible, he felt that true philosophical objectives and the careful assembling of data were complementary.

Over time economic history presented itself as empirical and multidisciplinary. Empirical in that it dealt with the facts of the past. The facts could be quantitative, as the NBER emphasized, or qualitative (as the German school believed was the responsibility of economic historians). It was also empirical in that economic historians saw history as a laboratory where they could test economic hypotheses.

The new economic history movement

After WWII, with the American economy booming, economists gained cachet. Economics with its rigorous models, tested from an abundance of numerical data by use of advanced, mathematically expressed formulae, came to be regarded as the paradigm of the social sciences.

At the same time economists were becoming more interested in the determinants of economic growth and what they saw as the widening gap between so-called developed and underdeveloped regions of the world. They saw the study of economic history as a source of insight into the issues of economic growth and economic development, and the new quantitative methods as the ideal tools for analysis.

The timing of the cliometric movement corresponded to the success of the quantitative growth studies of Simon Kuznets, a reflection of the infatuation economists had developed for the national accounting approach. This predisposed them to view the past through this same lens and altered their definition of historical evidence. Robert Fogel credited his mentor Kuznets as the primary inspiration for the work of the new economic history.

The main achievements of cliometrics have been to slowly but surely establish a solid set of economic analyses of historical evolution by means of measurement and theory, and, following the path blazed by Douglass North, to recognize the limits of neoclassical theory and bring into economic models the important role of institutions. Indeed, this latter focus ultimately spawned a new branch of economics altogether, the new institutional economics. Nothing can now replace rigorous statistical and econometric analysis based on systematically ordered data. Impressionistic judgements supported by doubtful figures and inadequate methods padded by subjective impressions have now lost all credibility.

The decline of economic history

The New Economic Historians threw their lot in with the econometricians. They turned to the collection and accumulation of historical data and their use in testing hypotheses about economic activity. In this way, cliometrics brought economic history into the mainstream of economics as it was developing. Economic history is now dominated by the cliometric method, so much so that it may be a contributing cause to the demise of economic history positions and courses. To non-historians it appears that economic history is little more than the application of economic theory to historical data. Departments facing declining resources feel they can do without a specialist in economic history when anybody can apply theory to old data . . . should they choose to do so.

Cliometrics has lost some of its significance with economists, who see it as another application of economic theory, albeit using historical data. Applied economics is certainly not a bad thing, but cliometrics is not by stretch of the imagination the only applied field of economics. Today it is often perceived as merely the application of theory and the latest quantitative techniques to old data instead of contemporary data. In that world view, a cliometrician is just a theorist with a more limited repertoire. As early as 1986 William Parker foreshadowed this problem when he observed that what was lost in the move to theory and econometric emphasis was the humane interest of the old British political economy and social welfare and the idealistic German historical economist's concern for the whole society.

The disappearing economic history course

Recent scholarship has highlighted the drop in economic historians and economic history course requirements at leading PhD granting institutions. Two examples will suffice to illustrate the problem.

Temin (2016) noted that when he first joined the MIT economics department in 1965, the approach to graduate education had long since been a three legged stool consisting of theory, econometrics, and economic history. Today, the three legs of the stool are micro theory, macro theory, and econometrics. Economic history is no longer required, nor is it listed as a subfield available to graduate students. In fact, among the 46 courses listed in the current graduate curriculum, six are statistics and econometrics courses, four are micro theory, and none are economic history.

In 2005, research by Haupert (2005) indicated that 7.1% of the economic historians then listed on eh.net had earned their PhD at the University of Chicago. This was second only to Harvard, which had produced 7.4% of economic historians, and just ahead of UC-Berkeley at 6.3%. Like MIT, the University of Chicago no longer requires a field course in economic history at the graduate level. Unlike MIT, it does at least still have one economic history course listed in the graduate course catalog. The three core areas of study at Chicago are price theory, quantitative methods, and the theory of income. The decline of economic history at Chicago began with "the elimination of the economic history requirement for the PhD in the early 1980s, in the decline in the percentage of doctoral dissertations written in the field after 1990, and in the shift of the two remaining economic historians into other fields, and in the termination of the economic history workshop."¹⁰

MIT and Chicago are not unique among top programs. More than half the 50 programs in our survey do not offer any economic history course, only 11 offer it as a field of emphasis, and eight require a course in economic history as part of the core curriculum. An additional three programs offer an economic history course as one of a number of restricted electives. Gone are the days when when Rondo Cameron was able to boast that "the vast majority of professional economists are trained in graduate schools that require their students to take course work or examinations in economic history." The view that economic history is a useful tool, and that the research of its practitioners is useful, has not translated into the belief that it is important to teach it as an independent course in graduate programs.

While the decrease in economic history positions is discouraging, many young economic historians market themselves as specialists in other fields, and indeed continue to publish in the economic history journals as well as other field journals. However, the drop in required economic history courses presents a grave concern for the future production of economic historians.

The disappearance of economic history from leading economics graduate programs is problematic. Without the tools being taught, without specific instruction in the methodology and approach, we risk extinction. We as economic historians don't need to convince ourselves about

⁹ Haupert 2005, Mitch 2011, Temin 2016

¹⁰ Mitch 2011 p 263

¹¹ Cameron 1965 p 112

the difference between economists using historical data and economic history, but apparently economics departments don't see the difference.

Where are we now?

Economic historians have contributed to the development of economics by combining theory with quantitative methods, constructing and revising databases, discovering and creating new ones entirely, and adding the variable of time to traditional economic theories. This has made it possible to question and reassess earlier findings, thus increasing our knowledge, refining earlier conclusions, and correcting mistakes. It has contributed greatly to our understanding of economic growth and development. The use of history as a crucible to examine economic theory has deepened our knowledge of how, why and when economic change occurs.

What makes economic historians unique is not their use of historical data or their focus on the past, but that they study the growth and evolution of economies over the long term. In this way, economic history's closest kin is development economics. In addition, the attention that economic historians give to noneconomic factors, such as legal and political systems, distinguishes them from economic theorists. Given the longer time span economic historians consider, doing so gives fuller attention to changes in institutions.

It is not just self-preservation that underlies this concern for the disappearance of economic history courses. The economics profession does not appear to share the view of economic history espoused by Ashley, that a desire to know about our past is reason enough to study it. Today the typical economist cares about the past "only to the extent that it sheds light on the present. This is unfortunate and we can (and should) keep arguing that this is a narrow view of social science." We risk missing many important contributions, or worse, failing to investigate them in the first place.

What do graduate programs do?

The training of an economist is something with which we are all familiar. According to the American Economic Association, there are 144 institutions in the United States that grant a Ph.D. in economics.¹³ This is the source of most of the academic economists in the country. There is a wide range of programs with a variety of requirements for those seeking the degree, and no doubt there are varying degrees of rigor across those institutions, but what are the similarities?

In an effort to discern these vital tools for economists, we look at 50 of the top ranked U.S. doctoral programs (Table 1) with an eye toward finding the common elements in the programs. What we found is not particularly surprising, and for economic historians, not particularly encouraging. This is especially true when considering that the graduates of these 50 programs, while they make up only a fraction of all the degrees awarded in economics, make up a much larger share of all the degrees awarded to those who will be teaching the next generation of

¹² Abramitzky 2015, p 1242

¹³ https://www.aeaweb.org/resources/students/schools

¹⁴ The list was compiled from the AEA website at https://www.aeaweb.org/resources/students/grad-prep/program-rankings. We looked at the top 50 graduate programs in economics using the Ideas RePEc ranking and the Econphd.net ranking of top economics programs and top economic history programs.

economists, since they will disproportionately land jobs in the doctoral programs. And the concentration is especially heavy at the top, where 76% of the current faculty in top ten economics departments were hired from other schools in the top ten. (Table 2)

All programs promote original research and promise faculty who are interested in training students to realize that goal and working with them to hone those skills. Many tout small enough class sizes to make that promise more doable. A common mission statement reads something like this: our doctoral program is designed to train students for careers in teaching and research in economics by providing strong backgrounds in economic theory and quantitative methods that can be applied to selected fields of specialization within the discipline. The most common fields offered are microeconomic theory (offered by 92% of the surveyed programs), econometrics (84%), industrial organization (74%), labor (68%), and international (66%). Followed by public finance, macro theory, development, and finance/financial. Then comes economic history at 11th on the list of most popular fields, offered by 32% of the programs surveyed, the same as environmental/natural resources/energy, and monetary. (Table 3)

They are clearly designed to provide a working knowledge of cutting-edge research skills and economic theory. All require some breadth to this theoretical foundation, and some go further to broaden each student's understanding of economic institutions. For example, the most common single course among other required courses is economic history, which 22% of the programs either require outright or as a restricted elective. This is followed by an advanced methods course (technical methodology) in 16%, advanced micro or macro theory (14%), research methods (12%), and game theory (8%). Two programs require courses on teaching and two others on writing.

The prevailing curriculum stresses the grounding of models in theory, thus ensuring that, even in applied work, theoretical assumptions are clearly specified in place of intuition. This approach promotes an open discussion of the implications of the results and the fit of the model. Most of these 50 PhD programs are organized in a way to provide students with a rigorous training in economic theory and econometrics, which they can then use to produce original research in a variety of applied, theoretical, and empirical settings. The intense focus on theory and technique allows for the application of rigorous theory enhanced with the latest techniques to carefully study "real world" issues and institutions.

Regardless of the final landing spot – be it academia, government, private sector, or think tank, a PhD in economics arms students with research skills, data modeling, and oral and writing skills that make economists relevant far beyond the classroom. A graduate of one of these programs should be able to successfully apply the knowledge and skills gained to a wide range of economic problems in a broad array of institutional settings.

Some programs have a unique spin, or at least a good catch phrase. For example, the state goal of the Economics Ph.D. program at the University of Wisconsin is fundamental and simple: "To train top notch economists." The program at CalTech "offers the opportunity for highly motivated and quantitatively oriented students to pursue interdisciplinary research in areas common to economics, political science, political economy, history, psychology, anthropology, law, and public policy . [because] a wide variety of social phenomena are best understood as the consequence of intelligent decisions by individuals pursuing their own ends."

The core

Regardless of the mission statement each program may have, most of which are generically similar, the foundation courses are de rigueur. Two semesters (or the quarter equivalent) of microeconomic theory, two semesters of macroeconomic theory, two semesters of econometrics, and a semester of quantitative methods. It is clear that an economist receives a strong theoretical and econometric foundation.

The typical core is two years, consisting of a first year sequence of two semesters of micro and macro, two of econometrics or quantitative methods, with the remaining econometrics or methods courses in the second year, along with any other required courses, and a start on the field courses. Theory exams in macro and micro, and in some cases quantitative methods as well, are taken between the first and second year. And all programs require participation in workshops where they will be exposed to a wide range of original research and present their own work in progress.

Micro and macro sequence

Two semesters (or the quarter equivalent) of micro theory are required by 74% of the programs, with 23% requiring three or more. The numbers are nearly identical numbers for macro, with 74% at two semesters and 20% at three or more. One program requires no specific microeconomic theory and only one semester of macroeconomic theory. Seven programs require one additional theory course beyond the required core.

The typical sequence of microeconomic theory courses covers models of equilibrium, utility, and duality including general and partial equilibrium, and core concepts and methods such as optimality, comparative statics, and envelope theorems. Game theory is used to study strategic interactions in economic organizations, including imperfectly competitive markets and economies with public goods and externalities.

Microeconomics makes use of data on the behavior of economic agents, markets, and institutions to understand issues in industrial organization, public finance, political institutions, labor markets, and the household, to name but a few. The micro courses prepare students to leverage the empirical implications of theoretical economic models, so they can test and estimate those models using the latest econometric and statistical techniques.

Almost universally, the sequence is designed to provide a thorough overview of microeconomic tools that will be used by PhD, students in all fields. The broad topics of the theory of firms and consumers, market structure and innovation, firm dynamics, product markets, and business networks form the bedrock of the education of an economist.

The topics appearing most frequently on macroeconomics course syllabi include growth theory, dynamic equilibrium, business cycles, monetary and fiscal policy, and Keynesian, Classical, and neo-Keynesian models of the economy. Intertemporal models of consumption and labor supply, implications of these models for the behavior of macroeconomic aggregates, fiscal policy, and monetary policy, money demand and inflation, economic growth are common topics as well.

The core courses are designed to train students in the methodology of modern dynamic economics, including dynamic programming, vector autoregressions, equilibrium concepts, and computational methods. Advanced courses required in some programs are topical and track frontier research in macroeconomics, including heterogeneous agent economics with adjustment

costs to capital and labor, wealth inequality in incomplete market economies with financial market imperfections, optimal taxation, and search theories of unemployment.

A quarter of the programs surveyed require a "math camp" prior to the beginning of the first semester of the program and two thirds of them require at least one additional math, quant, or stats class. 94% of the programs require a minimum of two semesters of econometrics and 20% require three or more semesters. In addition, eight programs require an elective in an advanced technical methods course, and four require a course in game theory.

The purpose of the quant courses is to build a sound background in statistical inferential procedures that are used in economic data analyses. Scarcity is a fundamental human problem, and economics is the study of addressing that scarcity through efficient allocation of resources. While verbal and graphical analyses are often helpful, economists can truly achieve precise and powerful results by setting up and solving constrained (*scarce* resources) optimization (*efficient* allocation) problems.

Sampling theory and Bayesian viewpoints form the bedrock of statistics courses. Courses usually cover probability, random variables and distributions, estimation, testing hypotheses, and sampling distribution of estimators. The math portion of the curriculum covers basic mathematical tools for consumer and producer theory, such as compact sets, differentiability, constrained optimization, linear algebra, and quadratic forms. Dynamic models of macroeconomics, growth, and human capital round out the common syllabus topics. The emphasis is generally not on proving theorems, but rather using the tools of mathematics to develop an understanding of how and why each method works in order to determine which approach is best to address the problem at hand.

The econometrics core of the graduate curriculum is designed to equip students with the tools they will need to ply their trade. Most of the programs build an empirical portion into these courses, particularly the econometrics sequences, requiring students to produce a paper highlighting a technique or model from the course. This requirement helps students acquire experience in applied econometric work, including the use of econometric software packages and programming techniques. These skills, unknown a generation ago, are now indispensible for all practicing economists, regardless of their fields of specialization.

A standard first your course in econometric theory and methods covers estimation techniques such as least squares, maximum likelihood, and generalized methods of moments, as well as inference techniques including standard asymptotics, unit root asymptotics, and bootstrapping. This course typically provides an understanding of econometric theory that underlies common econometric models, with a focus on regression models and their many extensions. The econometrics course sequence covers the foundational material in probability theory and econometric methods, preparing students to construct, estimate, and test econometric models as a process, bridging the gap between theory and applied work.

Other required courses

An essential skill of any successful researcher is the ability to communicate effectively in both written and oral presentations. Research presentations are one obvious example of oral communication, but teaching is certainly another, and arguably more important one. To that end, many of the top graduate programs (but not all) require a workshop, if not an entire semester course, in teaching.

Teaching has certainly evolved over time, and no longer resembles what those of us from an earlier generation remember as the standard lecture format, where professor talked and students took notes, asking questions only for clarification. Note that here I am not referring so much to graduate education, which has long resembled more of a seminar format featuring the development and exchange of scholarly information, usually in a small group setting. Rather, I am referring to undergraduate teaching. It is undergraduate teaching that will occupy the lion's share of an academic economist's workload. Most academic economists don't work at Ph.D. granting institutions, and even those that do will seldom be tasked exclusively with teaching graduate students.

Teaching experience is an essential part of graduate training. The task of teaching economics then, is one of the practical application of theoretical learning within a group setting, which ideally involves the introduction of ideas and methodology, the practice of skills, and beyond the most basic introductory levels, an exchange. Teaching courses are designed to introduce students to the art of planning, presenting, and evaluating undergraduate economics teaching. Content usually includes learning theory, instructional objectives, course planning, lecturing and discussion techniques, experiments or simulations, and writing exams and homework problems.

In the belief that practice makes perfect, and because it is cheap labor (though not as great a savings as hospitals realize when they use residents in the same way), most programs require, or at least offer the opportunity (or encouragement) to students to become teaching assistants and eventually take responsibility for their own courses. A teaching assistant generally breaks into teaching slowly, as part of their duties, they lead weekly discussion sections, hold office hours, and grade, and sometimes write, homework and exams. Most programs state as a goal that their graduates will have taught at least one course completely on their own before graduating.

Some programs also offer an introduction to research, or a research methods course. The object of this course is to teach students how to do research. It often takes the form of a workshop where students discuss and analyze in detail recent papers drawn from literature relevant to various areas of economics. It serves as a formal environment in which the students present and evaluate their research on a regular basis.

Economic history courses

Economic history courses tend to focus either on European or American economies. The typical European course will focus on the evolution of the economy from the industrial revolution forward, and the typical American course begins with the colonial economy. While the overarching theme tends to be economic growth, coverage of specialized topics is prevalent on the syllabi. For the European courses topics include mercantilism, industrialization, the standard of living debate, international trade, the gold standard, war, and the EC. The growth and development of the economy forms the backbone of the American courses. Certain topics receive special attention there as well: agriculture, banking, slavery, westward migration, the Great Depression, and postwar growth.

In either case, the tools learned in the core courses are applied here as well as in other field courses. In economic history courses the focus is on the use of theory and econometric techniques to research long-term factors in the development of the economy. While any country could be the focus of such examination, Europe and North America are most likely to be the

focus of an economic history course. None of the programs surveyed has a regularly scheduled economic history course dedicated to a region other than America or Western Europe.

Berkeley offers a unique course entitled Macroeconomic History. The course focuses on "research at the intersection of empirical macroeconomics and American economic history. The course seeks to provide a firm grounding in the areas of monetary economics, fiscal policy, credit market disruptions and financial crises, and the history of American short-run fluctuations and macroeconomics policy. Its main focus is on innovative approaches to identifying causation, dealing with data limitations, and empirical estimation of macroeconomic relationships." The desired outcome of the course is to guide students as they transition from reading the research of others to undertaking their own research.

If we take a broader look at economic history course syllabi, beyond just our 50 school sample, but still focusing only on graduate programs, we find a bit more variety in topics, but the same overall theme of the course being economic growth and development. The general orientation of the courses are much more macro (80%) than micro (20%). A very few courses are defined as an introduction to applied empirical research in economics mixing applications and policy with history. More or less all the other courses deal with the sources of growth faithful to the founding fathers of economic history and cliometrics. Emphasis is given to the use of economic theory, quantitative methods and the insights that profound historical knowledge can provide to the practice of economics. The US economy continues to serve as the central experimental lab. This is no surprise, given that we have restricted our search to American universities. Courses focused on international comparisons and Europe predominantly start with the Industrial Revolution. Very few deal with earlier periods.

The topics appearing most frequently on syllabi include:

- Long run trends in economic history and development, including globalization
- Growth theories
- Did institutions, culture, and religion matter?
- Agriculture
- Demography
- Transportation
- Money, banking, and finance.
- Industrial revolutions
- Financial crises
- Property rights
- Great Depression
- Almost any topic linking the past with the present (and sometimes the future)

The overall themes that pervade these courses focus on big questions such as the sources and determinants of sustainable economic growth. In particular can technical progress alone increase social welfare or can capital accumulation also lead to a permanent increase in per capita income? What factors of production engender sustainable growth: physical, environmental, human, social or technological knowledge? What mechanisms guarantee long-term growth in a

¹⁵ These syllabi were gathered from http://eh.net/course-syllabi/

market economy? What are the market structures within which such growth can be achieved? Why are current societies more productive and wealthy than their ancestors? And why isn't the whole world developed?

The primary skills emphasized in these courses include:

- Basics or prerequisites in macroeconomics and econometrics, complementary to courses in economic growth, economic development, or political economy. Nothing about history of economic thought!
- Micro- and macroeconomic modelling.
- Strong focus on quantitative and empirical methods in economic history.
- Application of appropriate analytical tools.
- Recognizing the diversity of methodologies practiced in conducting economic history analysis.
- Constructing datasets.
- Putting economics in context (in a non-mathematical style) and deep sources analysis.
- Written and oral communication, group work, computer skills, academic integrity.

This long run, big picture focus is common among all the economic history courses surveyed, and indeed, is central to our argument that economic history does provide added value to the education of an economist.

What do economic historians have to offer?

Economic historians have contributed to the development of economics in many ways, combining theory with quantitative methods, constructing and revising databases, and discovering and creating entirely new ones. This has made it possible to question and reassess earlier findings, thus increasing our knowledge, refining earlier conclusions, and correcting mistakes. In addition, this field has added greatly to our understanding of economic growth and development, affording the economic historian the valuable element of time as a variable, which the traditional theorist does not enjoy. The use of history to examine economic theory has deepened our knowledge and understanding within fundamental areas of research as to how, why, and when economic change occurs. It is perhaps in this area where the greatest contributions of economic historians have appeared.

Economic historians have contributed large and expansive data sets for researchers. The accumulation of the data is in itself monumental in many respects, but its usefulness has been expanded by the rapid growth of computing power. The ability to handle "big data" is not an economic issue by itself, but the construction of significant, important historical data sets, which can then be analyzed using the latest econometric techniques and computer programs, is very much a contribution of economic historians.

Revisionist history is not a complimentary term, but the revision of misunderstandings in history is certainly both important and necessary, not just for the reason of setting the record straight, but helping us understand how and why economies grow (or do not grow, as the case may be). A clear understanding of the causes of economic growth is among the most important things an economic historian can do. Economic historians have played a leading, and not always appreciated role here, overturning some accepted wisdoms, leading to hard feelings, resentment,

and controversy. However, they have also pushed forward the frontier of our understanding of economic growth and development.

Finally, economic historians have spawned entire new approaches to the study of economics. At the forefront are the new institutional economics, pioneered by Douglass North, and anthropometrics, which counts among its initial practitioners Robert Fogel. It is no coincidence that these two were recognized with the Nobel Prize in Economic Science in 1993.

Economic History plays an important role in the training of economists: Milton Friedman's classic treatise on money, as well as Simon Kuznets's path-breaking work on economic development, for example, were, to a considerable degree, based on historical analysis. Economic historians analyze the dynamic processes of development over time by formulating explicit formal models and econometric methods. They test hypotheses formally in order to enhance our understanding of such major determinants of the way we live today as the industrial revolution, industrialization and the information revolution. And they use historical (often archival) data to test the extent to which economic theory can be validated or improved upon in a wide array of ways, spawning totally new perspectives, such as counterfactual history. The granting of the 1993 Nobel Prize in Economics to two economic historians, Douglass North and Robert Fogel, is a clear recognition of the unique scientific contribution economic history makes to the larger economics discipline.

But should we even have to argue for a place for economic history? "At the least pragmatic level, indeed, the worth of economic history is that of intellectual activity generally, and nothing should be easier than convincing professional intellectuals that such activity is worthwhile." Economic history provides more and better economic facts, better economic theory, better economic policy, and does so over a longer period of time and greater variety of institutional settings than any other field of economic study can provide. The practical value of historical scholarship is not necessarily in its direct or immediate application. It is, rather, an indispensable part of the combined labor of the social sciences.

Conclusion

The meaning of the word "empirical" for (American) economic historians has varied considerably with the passing of time. One can observe a shift from a concept of empirical fact as understood by the "classical historian" (for whom anything, as opposed to only quantitative data, retrieved from archives can be used in his demonstration) to one as understood by (applied) economists (the empirical aspect consists of analysing numerical time series) and a convergence of theoretical viewpoints of historians and economists thanks to a common interest in the building of theories of development.

This (inductive) view is therefore intimately linked with the historical current in economics, the *German Historical School*, despite the use of more sophisticated techniques. It could be said that the two disciplines became closer, but probably within the frame of 'inductive' economics. On top of that, despite those early interests in building a kind of historically (i.e. inductively) grounded development economics, economic history mainly tries to provide answers to *historiographical* questions — and therefore speaks more to the historian than to the standard economist. As cliometricians have demonstrated, econometric techniques may be used, with the reconstitution of time series and identification of missing figures by interpolation or

¹⁶ McCloskey 1976 p 438

extrapolation — something, by the way that annoys professional historians. But such cliometric procedures have nonetheless a historical vocation - that of shedding light on historical questions— considering economic theory or econometrics as auxiliary disciplines of history. And when the cliometric approach was mobilised to build a development theory based upon clearly measured facts, it developed an economics more akin to the objectives of the German Historical School than one participating to the movement towards highly abstract and deductive theory that characterised the development of the neo-classical school of the time.

A conventional belief among economists (in fact, that of Lord Kelvin) is that "qualitative is poor quantitative". But could it not be possible that "quantitative is poor qualitative" might also sometimes be true? A big difference between economists and historians is the sense of so-called historical criticism and the desire to avoid any anachronism. In addition to close examination of the historical sources, this involves the close examination of the institutional, social and cultural context that forms the framework constraining the players' behaviour. It is true that the (new) economic history will not build a general theory —it shares too strongly the belief in the necessity of examining economic phenomena in their context—but it could suggest a few useful ideas and insights, based upon solid investigations and correctly estimated stylised facts, to economists who are attempting to develop laws of economic behaviour (unlike history, economics is still a nomological science). Economists and economic historians can also cooperate and jointly author research. This is a view shared by Daron Acemoglu, Simon Johnson, James Robinson, and Oded Galor, among others, trying to use the material derived from traditional history to build new ideas useful for economic theorists.

In summary, it could be contended that good economic history is not an easy exercise. Becoming too narrowly "economic," it would not be possible to answer certain questions that would require, for example, more information about the microstructure of financial markets or the actual functioning of stock exchanges during the period under scrutiny — it would only measure phenomenon that it cannot explain. It would require the specific approach (and extraneous information) of the historian to describe the reasons for the lack of relevance (or understand the shortcoming) of such an economic theory in a given context (precise place and period). It is perhaps only in this regard that economic history can provide something for economists by suggesting lines of research. However, if it became too "historical," it would cease to appeal to the economics profession. It is indeed a delicate balancing act, but one worth the effort to perfect.

If the Great Recession and crash of 2008 have taught us anything, it is that we need people around who know and understand what's happening in our economy, which can best be accomplished by understanding our history. As George Santayana famously warned, "those who cannot remember the past are condemned to repeat it." Now is the time to study economic history.

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Table 1: Fifty Graduate Programs in our Sample

BUCal Tech Carnegie Mellon Chicago Columbia Cornell Duke Georgetown Harvard Illinois Indiana Iowa Iowa St Johns Hopkins Mich State Michigan Minnesota Mississippi MIT Northwestern NYU Ohio State Penn Penn State Pitt Princeton Purdue Rice Rochester Rutgers Stanford Texas Texas A&M **UC** Davis UC Irvine

UCLA

Arizona St Berkeley Boston College Brown UCSD

UNC

USC

Vanderbilt

Virginia

Wash U

Washington

Wisconsin

Yale

Table 2: Origin of faculty at top ten programs

| Program | | | | | | | | | | | |
|---------------|----------|-------|---------|----------|---------|-------|-------|-----------|----------|-------|--|
| Source of PhD | Berkeley | Brown | Chicago | Columbia | Harvard | MIT | NYU | Princeton | Stanford | Yale | |
| Berkeley | 10.1% | 10.0% | 3.5% | 13.7% | 8.6% | 0.0% | 5.3% | 5.3% | 4.9% | 4.3% | |
| Brown | 0.0% | 5.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.4% | 0.0% | |
| Chicago | 0.0% | 2.5% | 10.4% | 3.9% | 3.4% | 5.1% | 7.9% | 8.8% | 2.4% | 4.3% | |
| Columbia | 1.4% | 10.0% | 1.7% | 3.9% | 0.0% | 0.0% | 6.6% | 0.0% | 2.4% | 2.2% | |
| Harvard | 20.3% | 22.5% | 17.4% | 15.7% | 29.3% | 30.8% | 13.2% | 26.3% | 19.5% | 6.5% | |
| MIT | 17.4% | 7.5% | 3.5% | 11.8% | 29.3% | 28.2% | 7.9% | 12.3% | 22.0% | 19.6% | |
| NYU | 2.9% | 2.5% | 3.5% | 5.9% | 0.0% | 2.6% | 1.3% | 1.8% | 0.0% | 0.0% | |
| Princeton | 4.3% | 7.5% | 6.1% | 3.9% | 3.4% | 7.7% | 6.6% | 12.3% | 0.0% | 2.2% | |
| Stanford | 11.6% | 2.5% | 8.7% | 9.8% | 3.4% | 10.3% | 7.9% | 0.0% | 24.4% | 8.7% | |
| Yale | 5.8% | 2.5% | 5.2% | 3.9% | 3.4% | 0.0% | 6.6% | 5.3% | 4.9% | 8.7% | |
| TOP TEN | 73.9% | 72.5% | 60.0% | 72.5% | 81.0% | 84.6% | 63.2% | 71.9% | 82.9% | 56.5% | |

Table 3: Characteristics of fifty leading graduate programs in economics

| Count | Math camp | Stats/Math courses | Micro courses | Macro courses | Econometrics courses | Number of economic history courses |
|-------|--------------|--------------------|------------------|------------------|----------------------|---|
| 0 | 38 | 18 | 0 | 1 | 2 | 27 |
| 1 | 11 | 24 | 1 | 2 | 6 | 7 |
| 2 | 1 | 6 | 37 | 37 | 30 | 8 |
| 3 or | | | | | | |
| more | 0 | 2 | 12 | 10 | 12 | 7 |
| max | 2 | 6 | 4 | 4 | 6 | 4 |
| mean | 1.1 | 1.4 | 2.2 | 2.2 | 2.2 | 0.9 |
| min | 1 | 1 | 1 | 1 | 1 | 0 |

Note: courses are semester equivalents