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Co-authorship in Economic History and Economics: Are We Any Different?

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Abstract

Over the last six decades there has been less co-authorship in leading economic history journals than in leading general economics journals. There has also been a strong, monotonic increase in co-authorship in economic history journals that roughly parallels general economics journals but sharply differs from leading history journals. Increased co-authorship cannot be explained by increasing use of econometrics or large data sets; rather, it is likely due to common changes in incentives facing economic historians and economists. Finally, co-authorships in economic history are more likely to be formed of individuals of different seniority compared to economics generally.

Keywords: co-authorship, economic history and economics

JEL classification codes: N01, B41

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Between the 1970s and 1990s there was a sharp rise in the extent of co-authoring of articles published in major economics journals, one which continued through the first part of the 21st century (Hamermesh, 2013). In economics generally co-authors are usually quite close in age. Our research question is whether research styles in economic history have paralleled those in economics generally along these dimensions and, if so, what has caused this parallel.

In the United States, most academic economic historians are housed in economics departments or within economics groups in business schools. Margo (2017) describes what he terms, "the integration of economic history into economics". He examines several dimensions of early-career research of economic historians, including whether Ph.D.-training occurs in economics or history departments, the use of econometric language in writing, publication of monographs, and publication in economics journals, including "top-five" economics journals. He argues that since the "cliometric revolution" in the 1960s, research practice in economic history has converged to that of applied economics more generally. He also argues that there was a structural break in this convergence around 2000, with later cohorts of economic historians increasingly taking on the research norms of economics departments. Similarly, Abramitzky (2015) shows that from 2000 the publication of economic history articles in the leading general economics journals has been at all-time high levels and that economic historians who completed their PhDs between 2010 and 2014 had similar job market prospects as those in economics.

The development of the discipline has been rather different outside the United States. Economic historians elsewhere are more likely to be housed in history, business/management or free-standing economic history departments. Simple inspection shows that there is less technical economic analysis and more historical discourse in the *Economic History Review* (*EHR*), the oldest and arguably leading economic history journal published outside the U. S., than in *Explorations in Economic History* (*EEH*) or the *Journal of Economic History* (*JEH*), arguably the two leading economic history journals published in the U. S.

These disciplinary differences have been accompanied by differences in attitudes, with Europeans often appearing to be more dismissive of co-authored work. For example, the Economic History Department at the London School of Economics greatly restricts (and until 2017 *de facto* prohibited)

joint work as part of a Ph.D. submission; and the Economic History Society has prohibited jointly-authored work from receiving its New Researcher Prize. In 2014 the *Abilitazioni Scientifiche Nazionali*, the competition in Italy conducted to determine the suitability of scholars for appointment to professorial positions, formally excluded co-authored publications in economic history that did not contain explicit statements indicating the contribution of each author (London School of Economics, 2017; Economic History Society, 2017; European Historical Economics Society, 2017).

In this note we examine whether and how these differences have led to different patterns of co-authorship. We consider co-authorship patterns in these three leading economic history journals over the past six decades.[1] We compare this to co-authorship in both general economics journals and history journals and examine the sources of differences among the fields. Finally, we study the nature of interactions among co-authors in economic history and economics.

The main findings of this paper are as follows. Sole authorship remains more common in economic history than in economics generally. However, over the past six decades there has been a roughly parallel trend towards increased co-authorship. This trend is distinctly different from leading history journals, where sole-authorship remains the norm. The increase in co-authorship cannot be explained by changes in content of the articles, as we find no evidence that content (as measured by the use of econometrics, large data sets, or citation of economics journals) has any effect on co-authorship. Rather, we find that changing disciplinary norms and a general integration of economic history into economics provides the most plausible explanation for the observed trend. Using a sample of prominent economic historians we find that both time and cohort effects significantly describe the increase in co-authorship, and that recent economic history Ph.D. cohorts have a particularly high propensity to co-author. Finally, we show that co-authors in economic history are typically further apart in age than co-authors in economics generally.

I. Co-authorship in Economic History and Economics, 1963-2011

A. General Trends in Co-authorship

[1]This is hardly the first bibliometric paper to examine publications in economic history specifically (e.g., Di Vaio *et al*. 2012, and earlier work). It is, however, the first to study the issues that we stress here.

We first tabulate authorship patterns in six decadal volumes of the *EHR*, *EEH* and the *JEH*. To match the tabulations for the "Top 3" general journals in economics—the *American Economic Review*, *Journal of Political Economy* and *Quarterly Journal of Economics*—produced by Hamermesh (2013), we restrict the sample to articles published in 1963, 1973, 1983, 1993, 2003 and 2011.

Columns (1) and (2) of Table 1 present calculations of the number of authors per article in the three economic history journals and the three general journals over these six decades. In each decade, the number of authors per article is lower in the economic history journals than in the general economics journals. The trends, however, are remarkably similar: In economic history, the number of authors per article has risen by 75 percent over this period. In economics generally the rise has been somewhat more rapid, an 89 percent increase.

The similarity is less pronounced if we examine the incidence of sole-authorship, shown in Columns (5) and (6) of Table 1. Co-authorship was very rare in economic history in the 1963 sample. It also occurred relatively infrequently in economics generally. By the turn of the 21st century, sole-authorship had become uncommon in economics, but remained much more common in economic history.[2] In both areas, however, the incidence of sole-authorship has fallen monotonically over the past five decades.

Research in economic history is occasionally published in the three top general economics journals. To examine whether co-authorship patterns in economic history differ when articles appear there, we take the data collected by Abramitzky (2015) and tabulate statistics for economic history articles published there.[3] The results of these tabulations are presented in Columns (3) and (7) of Table 1. In the last three decades both the numbers of authors per article and percentage sole-authored are slightly lower in economic history articles published in these outlets than is generally true; but

[2]The conclusion barely changes if we focus on four recent issues of the three economic history journals, late 2016 through 3rd quarter 2017. The ratio of authors to articles is 1.74, and 48.0 percent were sole-authored.

[3]Following Abramitzky (2015), we classify articles in leading general economics journals as economic history using *JEL* codes in the *EconLit* database, recognizing that the *JEL* classification scheme sometimes misclassifies articles (see also Cherrier, 2017). Because of the paucity of articles in economic history in any single year in these journals, we take triennial averages centered on the years listed in Table 1.

they are closer to the co-authorship pattern of all articles in these journals than to the pattern in the leading economic history journals. Moreover, the incidence of co-authorship in those articles has increased greatly.

Some of the authors in these leading economic history journals have sole or joint appointments in academic departments of history. Given this fact and the overlap between economic history and the two disciplines that comprise its name, perhaps economic history publications reflect trends in both economics and history. To examine this question, and thus compare the development of publishing in economic history to that of history and economics, we collected data on the number of authors of full-length publications in four leading history journals: The *American Historical Review*, the *English Historical Review*, the *Journal of American History* (its name since 1964) and *Past and Present*.[4]

The tabulations of authors per article and the percent sole-authored in these four journals are presented in Columns (4) and (8) of Table 1. The statistics for 1963 and 1973 look very similar to those describing economic history in those years. By the 1980s the characteristics of publications in economic history and history had begun to diverge: The number of authors per article in the former began rising (percentage sole-authored began falling), while in history, other than a slight blip in 1983, journal publication has remained essentially an individual activity. Economic history, at least in terms of the style of research represented by publication in its leading journals, has moved with economics generally and away from the research style remaining prevalent in history journals.

Perhaps the growing number of authors on each article and the decline in the incidence of sole-authorship in this aggregate differs across the three economic history journals. Our prior, given the differences between Europe and the U. S., is that the *EHR* may have less co-authorship than either the *JEH* or *EEH*. In an Online Appendix we present the same data as in Table 1 separately for each of the leading three economic history journals and also for eight additional economic and business history journals. Consistent with our priors, co-authorship has generally been most frequent in *EEH* and least frequent in *EHR*, but all three top journals have experienced roughly the same rates of increase in the

[4]There is no consensus on "top" journals in the broad field of history. Our choices are based on conversations with several historians. Thee journals included ranked 1st, 8th, 2nd and 4th respectively among all history journals in the number of citations received per published article. (https://www.timeshighereducation.com/news/top-20-journals-in-history/414798.article#survey-answer).

number of authors per article and declines in the incidence of sole-authorship. Increased co-authorship has, to a greater or lesser extent, also characterized all economic and business history journals.

B. Explaining the Rise in Co-authorship

We examine three types of explanations for the increasing co-authorship in economic history: 1) The content of economic history articles has changed in a way that facilitates co-authorship; 2) Increasing demand for article quality has necessitated more co-authorship; and/or 3) External factors, such as cultural changes within economics departments, have increasingly made co-authorship an optimal research strategy.

The biggest changes in the content of economic history journals over the past five decades have been the growing use of large data sets and technical methods, particularly econometrics (Collins 2015; Margo 2017; Mitchener 2015). Across the three top journals the share of articles using econometric techniques increased from zero in 1963, to 12.1 percent in 1973, 27.1 percent in 1983, 46.9 percent in 1993, 54.8 percent in 2003 and 55.0 percent in 2011.[5] Among papers using econometrics the average (median) number of data points in the largest regression increased from 40 (32) in 1973, to 122 (62) in 1983, 1,397 (180) in 1993, 5,285 (516) in 2003 and 17,126 (1,112) in 2011. The current decade is an era of "big data" in economic history due to technical advances driving down the cost of digitization and making it feasible to work with very large historical data sets (Collins 2015; Mitchener 2015). Whaples (1991) has noted that cliometric work may be better suited to collaboration than traditional economic history, with, for example, with one author being responsible for historical work and another for technical analysis.

To examine whether use of econometrics and big data sets can explain increased co-authorship, we estimate a Poisson regression describing the number of authors per paper and a probit on whether papers are sole-authored, using the full data set of articles in the *EEH*, *EHR and JEH* over the six decades. We control for whether the article contained a regression and for ln(Data points + 1), where

[5]As a general rule we only classified an article as using econometrics if we believed that the techniques used were examining an underlying economic relationship (and thus exclude e.g. articles containing linear regressions on a time trend). Many of the recent articles which do not use econometrics are "high tech" in other ways, for example, in the use of mathematical economic theory. We chose to control only for econometrics because it is easy to define and measure consistently.

"Data points" is the largest number of observations in a regression (0 if there are no regressions). The estimates also include indicators for year of publication, journal and time period covered (pre-1500, 1500-1750, 1750-1900, 1900+).[6] This last vector captures the "thickness" of research fields, as co-authorship may be easier for more recent periods, which are studied by more scholars.

The estimates are shown in the first two columns of Table 2. The most important determinant of co-authorship is year of publication, and the monotonic increase in co-authorship remains strongly significant after controlling for other factors. There is much weaker evidence that other factors influence the extent of co-authorship. Technical content does not matter, as neither the presence of a regression nor the size of the data set has a significant effect.[7] There is weak evidence of differences across the three journals, with significantly more authors per paper and a significantly lower probability of sole-authorship in the *EEH* than in the *EHR*. There is also a (weakly) significantly lower probability of sole-authorship in the *JEH* than in the *EHR*. There is also weak evidence that articles covering the period of the industrial revolution are more likely to be co-authored.[8]

A second test for whether changes in the content of articles have driven the trend toward co-authorship compares types of articles published in the *Economic History Review*. With the *EHR* having less co-authorship than the other journals, one content-driven explanation is that it is expressly a journal of economic and social history. With social historians typically housed in either economic history or history departments, the disciplinary differences shown in Table 1 suggest that they may be less likely to co-author. To examine this possibility, we categorized each article in the *EHR* in 1993, 2003 and 2011 as either primarily economic or primarily historical according to content and citations.

[6]The time periods roughly correspond to the classical and medieval periods, the early modern period, the industrial revolution and the modern world. Many articles covered dates which overlapped these time periods, and we assigned them to multiple time periods. A few articles were thematic and not easily categorized. We have put these into a separate period called "long run". We also experimented with categorizing articles which cover longer time periods (200 years plus) as being long run, which did not qualitatively alter the results.

[7]In addition to using the log of the number of data points, we also used indicator variables for whether the largest regression contained at least 1000, 2000-4999 or 5000+ observations. In each specification, the coefficient on the size of data set variable(s) was small and insignificant.

[8]Although borderline statistically significant, changes in time periods covered do not explain the trends shown in Table 1. Coverage of the 1750-1900 period slowly declined from 64 percent of all articles in 1963 to 55 percent in 2003, before recovering back to 64 percent in 2011. Similarly, changes in the distribution of articles across journals do not explain these results.

We also counted the number of citations to leading economics general and field journals outside of economic history in each article, classifying an article as primarily economic historical if it had at least three citations to leading economics journals.[9]

Surprisingly, there is no evidence to suggest that citation of economics articles is associated with an increased propensity to co-author. Among sole-authored papers, the mean (median) number of economics citations is 2.2 (1). Among co-authored papers, these figures are 2.0 (1). Over 72 percent of articles with at least three economics citations in the *EHR* are sole-authored. The third and fourth columns of Table 2 show estimates of regressions describing co-authorship there. The independent variables are the same as in Columns (1) and (2) (omitting journal indicators), but the measure of the article's citations to economics articles is added. The regressions provide no evidence that scholarship in economic history is more likely to be co-authored than scholarship in social history. Using econometrics has no statistically significant effect on the propensity to co-author; but having at least three citations to economics articles has a *negative* effect on the propensity to co-author and on the number of authors.[10]

A second hypothesis is that increased co-authorship has been driven by a need to produce higher-quality articles over time to gain acceptance into the top economic history journals. In the early days following the cliometric revolution there may have been more "low-lying fruit", important historical topics that had yet to be explored using quantitative methods. Over time these topics have been addressed and economic historians may have had to search further afield in terms of topics, data and methodology to make important further advances. This may have created a need to find more obscure sources, compile larger data sets, or use more technical methodology, which in turn may require increased specialization and collaboration. However, the direct evidence that it has become harder to publish in the top economic

[9]Any list of leading economic journals is *ad hoc*. We include major general journals (*AER, QJE, JPE, Econometrica, Rev. Ec. Stud., Rev. Ec. Stat*., the *Am. Ec. J.'s*, etc.) and major journals in many sub-fields (*J. Labor Econ., J. Monetary Econ. J. Finance*, etc.). A classification using a broader list of economic journals would hardly change the classification used here.

[10]Defining economics-related as having at least one reference to an economics article, these results disappear. This suggests that our conclusion does not hold for articles that might be more tangentially based in economics.

history journals is thin. The acceptance rate at the *JEH*, which is generally ranked as the top economic history journal, has been fairly constant since the 1980s.[11] In addition, Abramitzky (2015) and Margo (2017) note that the number of economic history papers published in the leading economics journals has been increasing since the 1980s, suggesting a selection process that over time may have led to fewer of the best papers in economic history being submitted to economic history journals.

Even if we assume that there has been some unobservable increase in the difficulty of publishing in the top economic history journals, there is little evidence that this has driven increased co-authorship. A simple test of this hypothesis involves comparing top-ranked with lower-ranked journals. The growth in the number of economic history journals over time implies that the relative difficulty of acceptance at lower-ranked journals would decrease when new journals are first published. Thus if demand for quality were the explanation for increased co-authorship at the top journals, we would find different trends in co-authorship at the top and the lower-ranked economic history journals. Yet, as the Online Appendix shows, lower-ranked economic history journals have also seen sharp increases in co-authorship, in many cases at rates similar to the top three journals. The increase in co-authorship pervades the entire publishing enterprise in economic history, almost regardless of journal quality.

A second problem with an explanation based on the demand for quality is that co-authored papers do not appear to be of greatly higher quality than sole-authored papers. We measure article quality by citations, as is common in the bibliometric literature. We take all articles in the 1993, 2003 and 2011 issues of the top three economic history outlets and estimate the production function:

$$(1) \qquad \ln(1+\text{CITES})_{ij} = \alpha_0 + \alpha_1 \text{NAUTHORS}_{ij} + \alpha_2 X_{ij},$$

where i and j indicate article and journal, the α are parameters, NAUTHORS is the number of authors, and X is the same vector of variables included in the regressions reported in Table 2. CITES is the cumulative number of Google Scholar citations to the article as of July 2017, ranging from 0 to 400,

[11] A crude measure is the ratio of the number of articles published in year t to the number of submissions from July in Year t-2 through June in Year t-1 (which is available in the *JEH* Editors' Notes from the 1980s). This ratio was remarkably constant over time: 0.245 in 1983, 0.258 in 1993, 0.276 in 2003 and 0.260 in 2011.

with a mean of 39 (median 25). This tremendous skewness in citation counts is typical of samples of articles in economics generally.

The estimate of $\alpha_1 = 0.072$ (s.e. = 0.075) provides only weak evidence of additional productivity from additional authors, and very far from any proportional increase in citations. It may, however, understate the returns to co-authorship, since it ignores the possibility that less-cited authors might co-author more frequently than others. To account for this, we take all 21 authors in this sample whose names appear on articles with different numbers of authors and estimate an author-fixed-effects version of (1).[12] The adjusted (for differences in publication dates) ratio of citations of two- to one-authored articles averages 1.20 (s.e.=0.19), not significantly different from 1, but significantly less than 2. This result is identical to the estimate in Hamermesh (2018) for articles in 2007-08 in the Top 3 general journals. The production function underlying (1) is far less than linear homogeneous in the top economic history journals.[13]

A final explanation is that increases in co-authorship in economic history are driven by scholars responding to changing incentives in economics departments. In the United States, economic historians are predominantly housed in economics departments. Economic history is no longer seen as a core subject to most historians (Lamoreaux, 2015). Formal evidence suggests that salaries in U.S. economics departments (at least in the major public universities) depend in part on the sheer number of publications (Hamermesh and Pfann 2012). A wide range of anecdotal evidence and some econometric analyses suggest that co-authored work is increasingly accepted as the norm in these discussions in economics departments and is barely discounted, if at all, with respect to salary, hiring or tenure decisions.[14] Although co-authorship has little effect on returns, it implies less work per paper and hence lowers the cost of publishing. Thus the existence of common incentives for economic

[12]We stress that the inclusion of these author effects does not vitiate any potential problems that might arise from authors strategically choosing writing partners. This re-specification does not allow causal inference. Rather, it implicitly allows including a large set of author characteristics that are not directly observable.

[13]Comparing these three journals to the other eight included in the Online Appendix, however, it is the case that lower-ranked journals, articles in which are typically less heavily cited, are less slightly likely to be co-authored.
[14]On the last two outcomes see Hamermesh and Pfann (2012); on the first, see Hilmer *et al*. (2015).

historians and economists provides the most plausible interpretation for the parallel trends in co-authorship by economists and economic historians shown in Table 1.

To test formally whether integration of economic history into economics can explain increased co-authorship, we collected data on publication histories from the CVs of 44 prominent economic historians based in economics departments.[15] For each we counted their total number of journal articles and book chapters and the number that were co-authored for every year through 2015. We then regress the co-authored share of publications by author i in year t on a series of decade indicators and decadal Ph.D. cohort indicators (with the 1960s as the omitted categories). We also include an indicator for whether the observation was within four years of the individual's Ph.D. completion.

Table 3 shows the results of this estimation. The first column shows the mean share of papers that are co-authored by decade and by cohort. The pattern of increasing co-authorship by decade shown in Table 1 for publications in for economic history journals also follows for all publications of prominent economic historians, although the overall rate of co-authorship is higher in the prominent sample than for economic historians overall. The regressions in the second and third columns show that the increase in co-authorship is due to a combination of time and cohort effects. Importantly for our purposes, there is a sharp increase in co-authorship for the entire sample from 2000 and a discontinuity for new Ph.D.s from the 1990s cohort. This result shows that from the 1990s onwards there was a clear change in co-authorship strategy for young economic historians, followed approximately a decade later by more established economic historians. The structural break in co-authorship by new Ph.D.s occurred a decade earlier than the structural break for other aspects of research strategy identified by Margo (2017). This change in strategy brought economic historians more in line with other applied economists. It can thus be interpreted as being consistent with the hypothesis that the integration of economic history into economics is the primary factor behind increasing co-authorship.

II. Co-author Relationships

[15]The list of economic historians was taken from Margo (2017, Table 1). He defines prominence as "having been a president of the EHA, the editor of the *JEH* or *EEH*, a fellow of the Cliometric Society, or having been awarded tenure at 'top-10' economics departments or the business school equivalent". We were unable to obtain CV's of 5 prominent economic historians in the Margo sample who received their Ph.D.s before 1970 (Lance Davis, Stanley Engerman, Douglass North, Richard Sylla and Thomas Weiss).

With the rise in co-authorship another question is what this change implies about other aspects of economic historians' research style. For example, with somewhat less co-authorship in economic history than in economics generally, if journal publication were equally easy and scholars devoted the same effort to producing articles, we would expect economic historians to have fewer journal articles on their CVs than economists generally. Is this expectation reflected in the data?

We use the data collected by Hamermesh and Pfann (2012) describing the publications of full professors in economics departments in the United States that were included among the top 200 worldwide in Kalaitzidakis *et al.* (2003) to study this issue. We restricted the sample to the 29 economics departments that contained at least one full professor whom we classified as an economic historian. The data set contained information on 554 economists, of whom we classified 8.5 percent as economic historians. Relevant for our purposes, the data include information on "Ph.D. age" in 2007 and on the number of articles each had published that were included in Web of Science tabulations as of 2008.

The average (median) full professor in this sample had 33 (24) published articles listed in the Web of Science, after 26 (26) years of post-Ph.D. experience. (The ranges were from 1 to 283 articles and 3 to 51 years of experience.) To examine differences in productivity between economic historians and economists generally, we related the number of published articles to an indicator for economic historian, a quadratic in post-Ph.D. experience and, in some specifications, school fixed effects.

Without accounting for school fixed effects (and, thus to some limited extent, for research quality), we find 6 more articles by otherwise identical economic historians than by economists. If we control for fixed effects, relevant since in this sub-sample the average economic historian is in a slightly lower-ranked department than other sample members, the estimate rises to a statistically significant 8 extra publications.[16] If anything, economic historians are at least as prolific as other economists in journal publishing, and perhaps even more so, despite working with slightly fewer collaborators.

[16]With a small number of economic historians in the sample, the implication that economic historians publish more than other economists may be due to a few highly prolific outliers. Results from a least absolute-deviations regression imply that the median economic historian of the same Ph.D. vintage as the median economist does publish more articles, but not significantly so, whether or not one includes department fixed effects.

Differences in research style may imply differences in research relationships: For example, teacher-student relationships may be more important in economic history. To consider this issue we collected information on the ages of all authors of two-authored papers that were published in the three top journals in 2003 and 2011. Through online search and direct communication we obtained the ages of both authors in 63 of 66 pairs. We combined this information with data on the age differences between authors of the 72 two-authored articles in the "Top 3" general journals in 2011 from Hamermesh (2013).

As the descriptive statistics in the upper panel of Table 4 show, co-authorships in economic history are on average between scholars who are more different in age from each other than are scholars in co-author pairs in economics generally. Regression estimates in the bottom panel, which include controls for journal and publication year, show a highly significant adjusted double-difference of over six years. Calculations using the nine two-authored economic history papers in 2003 and 2011 in the leading general journals show that, the average age difference between those coauthors is only 7.8 years (s.e. = 2.8), identical to the age difference between co-authors of all two-authored papers in these journals and years. This provides suggestive evidence that, when publishing in these general journals, economic historians are again responding to a norm that differs from the norm in economic history journals.

To see whether this difference is due to a greater prevalence of adviser-advisee co-authoring in economic history, we examined Acknowledgement footnotes and the CVs of each author to infer whether the younger author was a Ph.D. student of the older. We then formed an indicator for adviser-advisee co-authorship. Column (2) of Table 4 presents estimates of the equation describing the age difference between co-authors when we include the adviser-advisee indicator. Other things (field) equal, the age difference in adviser-advisee pairs is over ten years greater than in other co-author pairs. Nonetheless, we still find that it is significantly greater in economic history than in economics generally in co-author pairs with no teacher-student relationship. Moreover, when we interact the adviser-advisee indicator with the indicator for economic history (Column 3), the inferences are unchanged. Implicitly age differences between teacher and student are the same in economic history and economics generally. Although student-teacher collaboration occurs more frequently in economic

history than in economics generally (24 percent vs. 12 percent), the incidence of such relationships is too low to alter the inference that economic historians match with others whose age generally differs substantially from theirs.

Nor has sole authorship become chiefly the province of newly-minted Ph.D.s who need to publish their dissertations to demonstrate their scholarly *bona fides.* We searched through the CVs of sole-authors of the 2011 articles underlying the statistics in Table 1 to examine whether the published article could have arisen directly a Ph.D. dissertation. We could only characterize one-fourth of the sole-authored articles as stemming from recent Ph.D. dissertations.[17]

Why is the difference between co-authors' ages so much greater in economic history than in economics generally if not because of more frequent adviser-advisee co-authoring? We cannot prove causation for this difference, but at least two possibilities are consistent with it: 1) Perhaps the nature of the research process in economic history lends itself more to senior-junior relationships than in economics generally. Senior scholars may have a comparative advantage in knowledge of source materials and other non-technical research skills, whereas junior scholars may have a comparative advantage in more technical aspects of research; or 2) Given the relative sparseness in economic history of scholars over whom one might search for potential co-authors, search for personally and intellectually compatible co-authors will automatically generate a greater age difference than it would in the thicker field of general economics (or even in most economics sub-fields).

That potential co-authors in economic history are not readily at hand is suggested by a further examination of the data underlying the regressions summarized in Table 4. Of the 29 departments in which at least one economic historian was a full professor, 16 had only one such person. Comparing this to another field, labor economics, which we define narrowly here, in only 6 of these 29 departments were there more economic historians than labor economists among the full professoriate; in 21 of them the reverse was true. With fewer potential co-authors nearby, economic historians must search more widely for co-authors, presumably along the dimension of age as well as distance.

III. Conclusions and Implications

[17]We classify an article as likely coming from a Ph.D. dissertation if the individual was awarded their Ph.D. (or, in cases where we could not find Ph.D. dates, published their first academic article) between 2008 and 2011.

Over the last six decades published articles in economic history journals have been less likely to be co-authored than articles in general economics journals. While the number of authors per article and the fraction of single-authored papers remain lower, the former has been rising rapidly and the latter has been declining. One answer to the sub-titular question of this paper would be: Yes, in both levels and trends in co-authorship, but not that much different. By contrast, unlike economics and economic history, in history journals few articles are co-authored, and there is no trend toward increased co-authorship. Economics and economic history are, however, different in terms of the nature of collaboration, at least as evidenced by publications in the major journals. Co-authorships in economic history are more likely to be formed of individuals of much different seniority.

This note has presented substantial and often surprising new facts about the "what" of scholarship in economic history. We have also provided evidence that rules out some explanations of our results. In particular, there is no evidence that papers using econometrics or large data sets are more likely to be co-authored. Additionally, the increase in the incidence of co-authorship cannot be explained by any greater scholarly productivity of co-authored articles, since they are only slightly more productive than sole-authored articles. So too, the double-difference in the seniority gap between co-authors in economic history and economics generally is not explainable by a greater prevalence of adviser-advisee co-authorships in the former. Finally, the trend toward increased co-authorship in economic history is consistent with a more general integration into economics. It is plausible that increased rewards for sheer numbers of publications and the absence of discounting of co-authored publications within economics departments provides the best explanation for increasing co-authorship.

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Table 1. Co-authoring in Economic History, Economics and History, 1963-2011[a]

	AUTHORS/ARTICLE				PERCENT SOLE-AUTHORED			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
YEAR	Ec Hist Jrnls	Top 3 Genl[c]	Ec Hist in Top 3 [d]	4 Hist Jrnls[e]	Ec Hist Jrnls	Top 3 Genl	Ec Hist in Top 3	4 Hist Jrnls
1963	1.05[b]	1.16	-------	1.03	95.1	83.7	-------	96.8
1973	1.09	1.29	1.36	1.03	90.7	71.4	63.6	97.3
1983	1.25	1.52	1.55	1.15	77.3	54.4	59.0	90.1
1993	1.37	1.72	1.64	1.05	65.4	44.9	50.7	96.1
2003	1.55	1.99	1.97	1.04	61.5	25.9	26.3	97.6
2011	1.83	2.19	1.94	1.06	41.7	20.4	32.4	95.9

[a]Excludes, notes, comments, discussions and Presidential and Nobel Prize addresses.

[b]*Economic History Review* and *Journal of Economic History* only in 1963. In that year *Explorations in Economic History* was published with a different name and different focus.

[c]*American Economic Review*, *Journal of Political Economy* and *Quarterly Journal of Economics*. Calculated from Hamermesh (2013).

[d]Triennial averages, 1972-74, …, 2010-12.

[e]*American Historical Review*, *English Historical Review*, *Journal of American History* (*Mississippi Valley Historical Review* in 1963) and *Past and Present*.

Table 2. Determinants of Co-authorship, Economic History Journals, 1963-2011 (N = 414)*

	ALL THREE JOURNALS (1963-2011)			*EHR* (1993-2011)	
Dependent Variable:	**No. of authors**	**Sole-authored**		**No. of authors**	**Sole-authored**
Estimation method:	Poisson	Probit		Poisson	Probit
Year=1973	-0.020 (0.06)	-0.304 (0.53)		----------	----------
Year=1983	0.161 (0.06)	-0.934 (0.50)		----------	----------
Year=1993	0.233 (0.06)	-1.281 (0.50)		----------	----------
Year=2003	0.353 (0.08)	-1.353 (0.50)		0.183 (0.16)	-0.390 (0.45)
Year=2011	0.499 (0.07)	-1.827 (0.50)		0.421 (0.10)	-1.124 (0.38)
JEH	0.039 (0.05)	-0.283 (0.17)		----------	----------
EEH	0.107 (0.06)	-0.423 (0.18)		----------	----------
Econometrics	-0.061 (0.11)	0.056 (0.33)		0.019 (0.13)	0.185 (0.35)
Ln(observations)	0.018 (0.02)	-0.030 (0.05)		----------	----------
Period studied: before 1500	-0.064 (0.06)	0.079 (0.25)		-0.200 (0.12)	0.376 (0.42)
1500-1750	-0.043 (0.06)	0.057 (0.19)		-0.082 (0.14)	0.416 (0.36)
1750-1900	0.072 (0.04)	-0.122 (0.14)		0.102 (0.09)	-0.103 (0.29)
3+ citations to economics	----------	----------		-0.281 (0.12)	0.736 (0.35)
Pseudo-R^2	0.025	0.144		0.026	0.123

*Robust standard errors in parentheses.

Table 3. Decadal and Cohort Effects on the Probability of Co-authorship (N = 44 Authors)

	Mean co-authorship	Coefficient estimate	Robust standard error
Decade			
1960s	0.100	---	---
1970s	0.320	0.159	0.066
1980s	0.379	0.151	0.082
1990s	0.407	0.140	0.077
2000s	0.540	0.240	0.086
2010s	0.654	0.316	0.086
Ph.D. Cohort			
1960s	0.380	---	---
1970s	0.423	0.025	0.079
1980s	0.502	0.090	0.086
1990s	0.688	0.290	0.109
2000s	0.736	0.283	0.087
New PhD		-0.215	0.041
Constant		0.219	0.040
N Articles		1153	
Adj. R^2		0.135	

Table 4. Age Differences between Co-authors of Two-Authored Articles, Economic History and Economics, 2003 and 2011[a]

Descriptive Statistics

Age difference:	**Ec. Hist.**	**Econ.**
Mean	13.08	8.26
	(1.05)	(1.25)
Median	12	5
N =	63	72

Regression Estimates (Dep. Var. is Age Difference, N=145)

Ind. Var.	**(1)**	**(2)**	**(3)**
Economic history	6.25	4.52	5.82
	(2.45)	(2.25)	(2.41)
Adviser-advisee		10.62	14.03
		(1.98)	(3.08)
Economic history*			-5.80
adviser-advisee			(4.02)
Adj. R^2	0.035	0.205	0.212

[a]Standard errors in parentheses below the parameter estimates and the means. Also included in the regressions are journal identifiers and year of publication.

ONLINE APPENDIX (Not for publication)

Table A1. Co-authors per Paper (Numbers of Papers) in English-language Economic History Journals, 1963-2011

YEAR	*EEH*	*EHR*	*JEH*	*Top 3*	*BH*	*SEHR*	*RevHE*	*AEHR*	*CLIO*	*EREH*	*BHR*	*EHDR*	*Others*
1963		1.11 (18)	1.00 (23)	**1.05**	1.11 (9)	1.00 (8)		1.00 (7)			1.11 (18)		**1.07**
1973	1.14 (21)	1.00 (24)	1.13 (30)	**1.09**	1.00 (9)	1.00 (7)		1.00 (9)			1.05 (19)		**1.02**
1983	1.52 (23)	1.19 (21)	1.14 (44)	**1.25**	1.31 (16)	1.00 (8)	1.50 (16)	1.22 (9)			1.13 (16)		**1.26**
1993	1.33 (21)	1.22 (27)	1.53 (30)	**1.37**	1.38 (24)	1.15 (13)	1.13 (16)	1.00 (9)			1.11 (9)	1.06 (16)	**1.17**
2003	1.85 (20)	1.41 (17)	1.43 (28)	**1.55**	1.43 (21)	1.23 (13)	1.25 (24)	1.33 (15)		1.69 (13)	1.08 (13)	1.31 (16)	**1.33**
2011	1.92 (38)	1.76 (50)	1.84 (32)	**1.83**	1.86 (37)	1.75 (12)	1.53 (15)	1.38 (13)	1.54 (13)	1.78 (18)	1.31 (16)	1.40 (20)	**1.70**

Key: TOP3 (EEH = *Explorations in Economic History*; EHR = *Economic History Review*; JEH = *Journal of Economic History). Others (*BH = *Business History*; SEHR = *Scandinavian Economic History Review*; REVHE = *Revista de Historia Economica*; AEHR = *Australian Economic History Review*; CLIO = *Cliometrica*; EREH = *European Review of Economic History*; BHR = *Business History Review*; EHDR = *Economic History of Developing Regions).*

Table A2. Percentage of Sole-authored Papers in English-language Economic History Journals, 1963-2011

	EEH	*EHR*	*JEH*	*Top 3*	*BH*	*SEHR*	*RevHE*	*AEHR*	*CLIO*	*EREH*	*BHR*	*EHDR*	*Others*
1963		88.9	100	**95.1**	88.9	100		100.0			88.9		**92.9**
1973	85.7	100	86.7	**90.7**	100	100		100.0			94.7		**97.7**
1983	56.5	81.0	86.4	**77.3**	68.8	100	81.3	77.8			87.5		**81.6**
1993	66.7	77.8	53.3	**65.4**	75.0	84.6	87.5	100			88.9	93.8	**86.2**
2003	45.0	76.5	64.3	**61.6**	66.7	76.9	75.0	80.0		38.5	92.3	68.8	**56.1**
2011	34.2	50.0	37.5	**41.7**	43.2	41.7	60.0	61.5	53.8	50.0	75.0	60.0	**51.9**