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## CO-AUTHORSHIP IN ECONOMIC HISTORY AND ECONOMICS: ARE WE ANY DIFFERENT?

Andrew Seltzer Daniel S. Hamermesh

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#### **ABSTRACT**

Over the last six decades articles published in leading economic history journals have been less likely to be co-authored than articles published in leading general economics journals. However, in both economic history and general economics journals there have been strong, monotonic increases in the number of authors per article and the fraction of co-authored papers. Economics and economic history differ in the nature of collaboration, in that co-authorships in economic history are more likely to be formed of individuals of different seniority as compared to economics generally.

Andrew Seltzer Royal Holloway University of London A.Seltzer@rhul.ac.uk

Daniel S. Hamermesh
Department of Economics
Royal Holloway University of London
Egham, TW20 0EX
UNITED KINGDOM
and NBER
Daniel.Hamermesh@rhul.ac.uk

Hudson (1996) demonstrated that a change in the nature of publishing in economics had occurred between the 1970s and 1990s, namely a rise in the extent of co-authoring in articles published in major economics journals. Hamermesh (2013) showed that this trend continued through the first part of the 21<sup>st</sup> century. He also demonstrated that co-authorships in economics are typically not the result of teacher-student co-operation, but rather that co-authors are usually quite close in age. Our research question here is whether research styles in economic history have paralleled those in economics generally along these dimensions.

A widely-held stereotype within the economics profession is of economic historians as lone scholars digging through archival material and producing scholarly work on their own. Anecdotally, economic historians appear to be more dismissive of co-authored work. For example, the Economic History Department at the London School of Economics greatly restricts (*de facto* prohibits) 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 that is 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 this stereotype and the anecdotal evidence are consistent with the nature of publication in economic history journals. <sup>1</sup>

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

We first tabulated the authorship patterns in six decadal volumes of the *Economic History* Review, Explorations in Economic History, and the Journal of Economic History, three of the oldest and arguably the three leading scholarly journals in economic history. To match the

<sup>&</sup>lt;sup>1</sup>This is hardly the first bibliometric paper to examine publications in economic history (e.g., Di Vaio *et al*, 2012, and earlier work). It is, however, the first to study the issues that we stress here.

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 restricted 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 leading general journals over these six decades. In each decade the number of authors per article is lower in the leading economic history journals than in economics journals generally. The trends, however, are remarkably similar: In economic history the number of authors per article has risen by 68 percent over this period; and in economics generally (as indicated by publications in the "Top 3" journals) the rise has been slightly, albeit statistically significantly more rapid, an 89 percent increase.

The similarity is less pronounced if we examine the incidence of sole-authorship, shown in Columns (4) and (5) of Table 1. Co-authorship was very rare in economic history and in economics generally in the 1963 sample. By the turn of the 21<sup>st</sup> century, sole-authorship had become fairly uncommon in economics, but remained much more common in economic history. In both areas, however, the incidence of co-authorship has been rising monotonically over the past five decades.<sup>2</sup>

Research in economic history is occasionally published in the three top general journals that are featured in Columns (2) and (5) of Table 1. 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 in those three journals.<sup>3</sup> The results of these tabulations are presented in Columns (3) and (6) of Table

<sup>&</sup>lt;sup>2</sup>Viewing these decadal tabulations as samples from populations of articles written in economic history and economics generally, all of the percentages sole-authored are significantly higher in economic history than in general economics.

<sup>&</sup>lt;sup>3</sup>Because of the paucity of articles in economic history in any single year in these journals, we take triennial averages centered around the years listed in Table 1.

1. For these representative years, 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 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 data show that, just as in economic history journals and in economics generally, the incidence of co-authorship has increased greatly.

Table 1 aggregates all three economic history journals; but perhaps the growing number of authors on each article and the decline in the incidence of sole-authorship in this aggregate arise from changes in only one or two of the three journals. To examine this possibility, in Table 2 we present the same data for each of the journals separately. The tabulations make it clear that there are differences among the journals: Co-authorship has generally been most frequent in *Explorations in Economic History*, the most quantitative of the three economic history journals, and least frequent in *the Economic History Review*, the least quantitative. All three journals, however, have seen roughly the same rate of increase in the number of authors per article and declines in the incidence of sole-authorship.<sup>4</sup>

#### II. Co-author Relationships

With co-authored articles increasingly common and, indeed, now more common than sole-authorship in the leading economic history journals, the question becomes what their prevalence implies about other aspects of economic historians' research style. Research in economic history requires a somewhat different set of skills from research in other fields of economics, and impressionistically economic historians produce fewer papers than economists. These differences in research style may imply differences in research

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<sup>&</sup>lt;sup>4</sup>The patterns in other economic history journals are not that different. Appendix Tables A1 and A2 to this paper show sole authorship and number of authors per paper over the period 1963-2011 for a wide range of English-language economic history journals. The levels of co-authorship in the other economic history journals is generally lower than those shown in Table 2, but the trend increase is very similar.

relationships: for example, teacher-student relationships may be more important in economic history.<sup>5</sup>

To examine this issue we collected information on the ages of all authors of two-authored papers that were published in these three journals in 2003 and 2011. Of the 66 two-authored papers in this subset of our data, we were able to obtain the ages of both authors in 63 of the pairs, with one missing from *EEH* and two from the *EHR*.

Column (2) of Table 3 presents the frequency distribution describing the differences in ages between the authors of two-authored articles. 44 percent of scholarly partners are fewer than 10 years different in age; but another 44 percent are at least 15 years apart. The average age difference is roughly 13 years.

Compare these statistics to those calculated from the data on two-author co-authorships underlying Hamermesh (2013), presented in Column (3) of Table 3, which summarizes these same age differences for articles published in these two years in the leading general economics journals. 64 percent of co-authors of those articles are fewer than 10 years apart in age, and only 16 percent are at least 15 years apart. The average age difference is less than 8 years. Given the number of observations in each sample, the average age difference in economics generally is highly significantly below that in economic history. Indeed, the overall distribution is different from that in economic history  $(X^2(5) = 108.16)$ .

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<sup>&</sup>lt;sup>5</sup>Several people have also commented to us that they believe that these differences in the nature of research are likely to have led to more stable co-authoring relationships in economic history, with more co-author pairs working together over years or even decades. While this claim seems plausible, the decadal publication data used in this study are not suited to testing it. It is an interesting topic for future research.

<sup>&</sup>lt;sup>6</sup>As a note, there is a huge range of ages of authors at time of publication in these three journals, between 28 and 85, not that different from co-authorship in economics generally in these two years (ages 24 to 77).

<sup>&</sup>lt;sup>7</sup>Even if the three co-authorships for which we failed to obtain information were between scholars of identical ages (age difference = 0), the average age difference in two-authored articles in these economic history journals would still be much, and highly significantly greater than that in economics generally.

<sup>&</sup>lt;sup>8</sup>Taking the nine two-authored papers in 2003 and 2011 in the leading general journals that are classified as economic history, the average age difference between the authors is 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

Why is the difference between co-authors' ages so much greater in economic history than in economics generally? We cannot prove causation for this difference, but at least two possibilities are consistent with it: 1) It may be that the nature of the research process in economic history does lend 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 the more technical aspects of research; or 2) Given the relative sparseness in economic history of scholars over whom one might search for potential coauthors, random searching will automatically generate a greater age difference than it would in the thicker field of general economics (or even in most of the sub-fields in that discipline).

#### III. Co-authorship in Economic and Social History

Table 2 shows that the Economic History Review has noticeably less co-authorship than the other two leading economic history journals. A plausible reason for this contrast is subdisciplinary differences: Economic History Review is expressly a journal of economic and social history, whereas the other two are journals of economic history. The stereotype of the lone scholar may be more accurate for social historians than economic historians, and thus the difference in the incidence of co-authorship across journals may simply be due to the difference in the composition of papers. The higher incidence of co-authorship by economic historians publishing in general journals is suggestive of this possibility. To examine this possibility, we categorized each article in the EHR in 2003 and 2011 as either primarily economic or primarily historical according to content and citations. We classified an article as having economic content if it either had a formal mathematical economic model or used

evidence that, when publishing in these general journals, economic historians are again responding to a general norm that differs from the specific norm in economic history journals.

econometric analysis.<sup>9</sup> For each article we also counted the number of citations to leading economics general and field journals outside of economic history.<sup>10</sup> We classified an article as primarily economic if it either had any citations to leading economics journals or, in an alternative classification, if it had at least three citations to leading economics journals.

Table 4 characterizes the co-authorship patterns of *EHR* articles from 2003 and 2011 by different methods of categorization. Surprisingly, regardless of our approach to classifying articles as primarily economic, there is no evidence to suggest that economic history has a higher incidence of co-authorship than social history. Indeed, regardless of the definition used, the rate of sole-authorship was higher in primarily economic articles, in some instances significantly so. The lower co-authorship rate in the *Economic History Review* is due to some underlying cultural differences associated with this journal or with work outside the United States more generally, rather than with discipline-specific factors.<sup>11</sup>

### IV. Conclusions and Implications

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

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<sup>&</sup>lt;sup>9</sup>Inevitably there were a couple of borderline cases where the classification was ambiguous. For example, one article contained a linear regression on a time trend but no other explanatory variables. As a general rule, we only classified an article as having economic content if we believed that the techniques used were examining an underlying economic relationship. We did not classify as having economic content several articles that used an explicit, but informal economic framework.

<sup>&</sup>lt;sup>10</sup>Any definition of what constitutes the leading economic journals is *ad hoc*. We include the leading general journals (*AER, QJE, JPE, Econometrica, Rev. Ec. Stud., Rev. Ec. Stat.*, the *Am. Ec. J.'s*, etc.) and the leading journals in each major sub-field (*J. Labor Econ., J. Monetary Econ. J. Finance*, etc.). It is fairly clear from inspection that a classification using a broader list of economic journals would be very similar to that used in this paper.

<sup>&</sup>lt;sup>11</sup>Another hypothesis is that the differences in sole authorship rates are due to differences in time periods covered across the three journals. The *EHR* publishes more papers covering medieval and early modern economic history than the *EEH* or *JEH*. Sole authorship may be more common for work on earlier periods, either because of differences in the nature of source materials, or less overall research activity and hence fewer opportunities for collaboration. We have tested this hypothesis by looking at sole authorship rates and the number of authors per paper for articles published in 2003 and 2011 covering the periods before 1500, 1500-1750, 1750-1900, and 1900 onwards. Surprisingly, there are virtually no differences in the sole authorship rates across periods of study. There is a small, but monotonic increase in the number of authors per paper over the time periods; however, this alone explains virtually none of the differences among the three journals.

authors per article and the fraction of single-authored papers remain lower, the number of authors has been rising rapidly and the fraction of single-authored articles 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; and economic historians are even less different, and appear to conform more to (economics) profession-wide norms, when publishing in general economics journals. Economics and economic history are 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 different seniority as compared to economics generally.

This note has presented substantial and often surprising new facts about the "what" of scholarship in economic history. We have not shed much light on the "why" underlying the facts that we have discovered. Rather, they provide a series of paths for future research by others examining styles of scholarship in economic history and comparing them to the field of economics generally.

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Table 1. Co-authoring Patterns in Economic History and Economics, 1963-2011\*

	AU	THORS/ARTIC	PERCENT SOLO				
	(1)	(2)	(3)	(4)	(5)	(6)	
YEAR	Ec History Journals	Top 3 Genl Journals***	Ec Hist in Top 3****	Ec History Journals	Top 3 Genl Journals	Ec Hist in Top 3	
1963	1.05**	1.16		95.1	83.7		
1973	1.09	1.29	1.36	90.7	71.4	63.6	
1983	1.25	1.52	1.55	77.3	54.4	59.0	
1993	1.37	1.72	1.64	65.4	44.9	50.7	
2003	1.55	1.99	1.97	61.5	25.9	26.3	
2011	1.83	2.19	1.94	41.7	20.4	32.4	

<sup>\*</sup>Excludes, notes, comments, discussions and Presidential and Nobel Prize addresses.

<sup>\*\*</sup>Economic History Review and Journal of Economic History only in 1963. In this year Explorations in Economic History was published with a different name and different focus.

<sup>\*\*\*\*</sup>American Economic Review, Journal of Political Economy and Quarterly Journal of Economics. Calculated from Hamermesh (2013).

<sup>\*\*\*</sup>Triennial averages, 1972-74, ..., 2010-12.

Table 2. Co-authoring Patterns in Three Economic History Journals, 1963-2011\*

YEAR	<b>AUTHORS/ARTICLE</b>			% SOLO			
	EEH	EHR	JEH	EEH	EHR	JEH	
1963		1.11 (18)	1.00 (23)		88.9	100.0	
1973	1.14 (21)	1.00 (24)	1.13 (30)	85.7	100.0	86.7	
1983	1.52 (23)	1.19 (21)	1.14 (44)	56.5	81.0	86.4	
1993	1.33 (21)	1.22 (27)	1.53 (30)	66.7	77.8	53.3	
2003	1.85 (20)	1.41 (17)	1.43 (28)	45.0	76.5	64.3	
2011	1.92 (38)	1.76 (50)	1.84 (32)	34.2	50.0	37.5	

<sup>\*</sup>Excludes notes and discussions. Numbers of articles are listed in parentheses below the descriptive statistics.

Table 3. Distribution of Age Differences of Co-authors of Two-Authored Articles (Percentages)

(1)	(2)	(3)
Age Difference (years)	Economic History Journals	Top 3 General Journals
0-4	23.8	48.2
5-9	20.6	18.2
10-14	11.1	17.5
15-19	22.2	4.9
20-24	6.5	7
25+	15.8	4.2
Mean	13.06*	7.83
Std. Error	1.27	0.67
N =	63	143

<sup>\*</sup>Significantly different from economics at the 95-percent level of confidence.

Table 4. Percentage Sole-authored Articles, *Economic History Review*, 2003 and 2011, by Economic Content and Citations (N=68)

Criterion	No	<b>N</b> =	Yes	N=
Economic Content	47.1	34	61.8	34
>0 Economics Citations	52.4	21	55.3	47
>2 Economics Citations	44.2*	43	72.0	25
Content & >0 Cites	48.6	35	60.6	33
Content & >2 Cites	48.9*	47	66.7	21

<sup>\*</sup>Significantly different from the "Yes" entry at the 95-percent level of confidence.

Appendix Table A1: Co-authors per Paper in English-language Economic History Journals, 1963-2011

YEAR	BH	<b>SEHR</b>	RevHE	<b>AEHR</b>	CLIO	<b>EREH</b>	BHR	<i>IESHR</i>	<b>EHDR</b>
1963	1.11	1.00					1.11	1.00	
1705	(9)	(8)					(18)	(9)	
1973	1.00	1.00		1.00			1.05	1.07	
	(9)	(7)		(9)			(19)	(15)	
1983	1.31	1.00	1.50	1.22			1.13	1.12	
1903									
	(16)	(8)	(16)	(9)			(16)	(17)	
1993	1.38	1.15	1.13	1.00			1.11	1.00	1.06
1,5,0	(24)	(13)	(16)	(9)			(9)	(16)	(16)
2003	1.43	1.23	1.25	1.33		1.69	1.08	1.00	1.31
	(21)	(13)	(24)	(15)		(13)	(13)	(14)	(16)
2011	1.86	1.75	1.53	1.38	1.54	1.78	1.31	1.00	1.40
	(37)	(12)	(15)	(13)	(13)	(18)	(16)	(17)	(20)
	(37)	(12)	(10)	(15)	(10)	(10)	(10)	(1)	(20)

Key:  $BH = Business\ History;\ SEHR = Scandinavian\ Economic\ History\ Review;\ RevHE = Revista\ de$  Historia Economica;  $AEHR = Australian\ Economic\ History\ Review;\ CLIO = Cliometrica;\ EREH =$  European Review of Economic History;  $BHR = Business\ History\ Review;\ IESHR = Indian\ Economic\ and\ Social\ History\ Review;\ EHDR = Economic\ History\ of\ Developing\ Regions.$ 

Note: AEHR was published in 1963 under a different name and with a different focus. We have not gathered data for this observation.

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

YEAR	ВН	SEHR	RevHE	AEHR	CLIO	EREH	BHR	IESHR	EHDR
1963	88.9	100.0					88.9	100.0	
1973	100.0	100.0		100.0			94.7	93.3	
1983	68.8	100.0	81.3	77.8			87.5	94.1	
1993	75.0	84.6	87.5	100.0			88.9	100.0	93.8
2003	66.7	76.9	75.0	80.0		38.5	92.3	100.0	68.8
2011	43.2	41.7	60.0	61.5	53.8	50.0	75.0	100.0	60.0